

MAY, 1908.

Vol. LII. No. 363.

JOURNAL OF THE Royal United Service Institution.



PUBLISHED UNDER THE AUTHORITY OF THE COUNCIL.

Editor - Captain H. Garbett, R.N. (Retired).

All communications (except those for perusal by the Editor only) to be addressed to the
Secretary, Royal United Service Institution.

LONDON :

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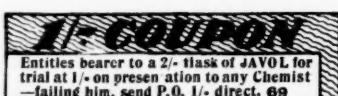
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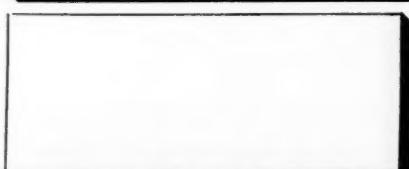
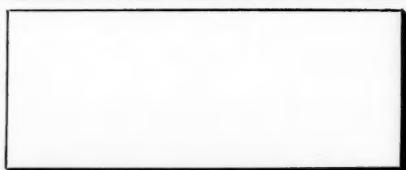
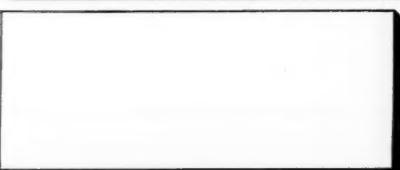
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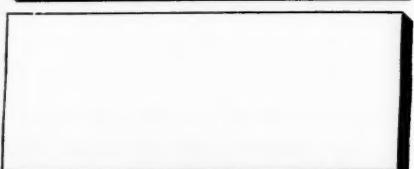
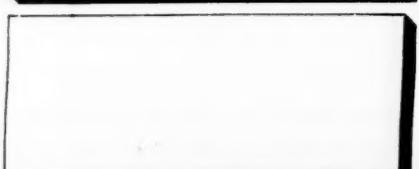


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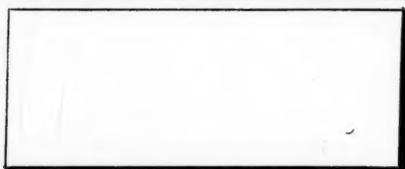
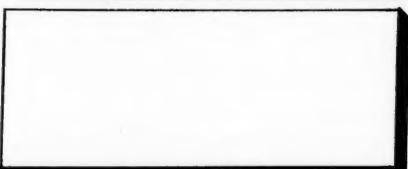
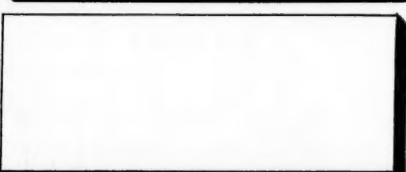
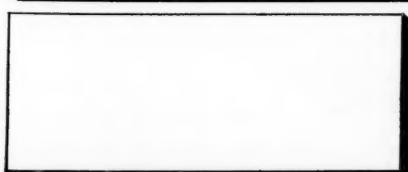
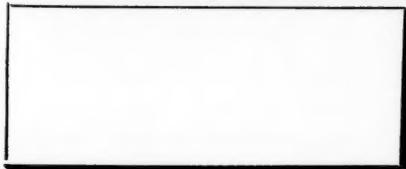
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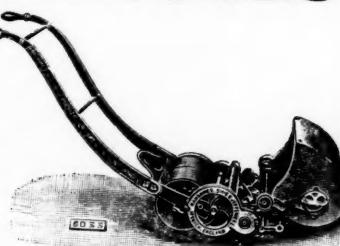
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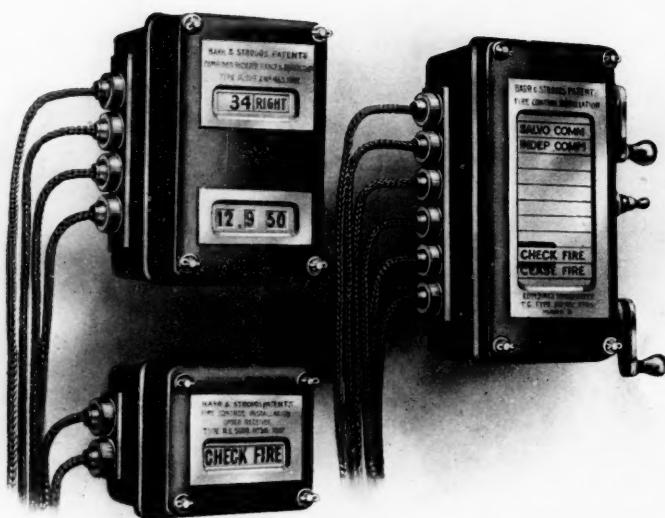
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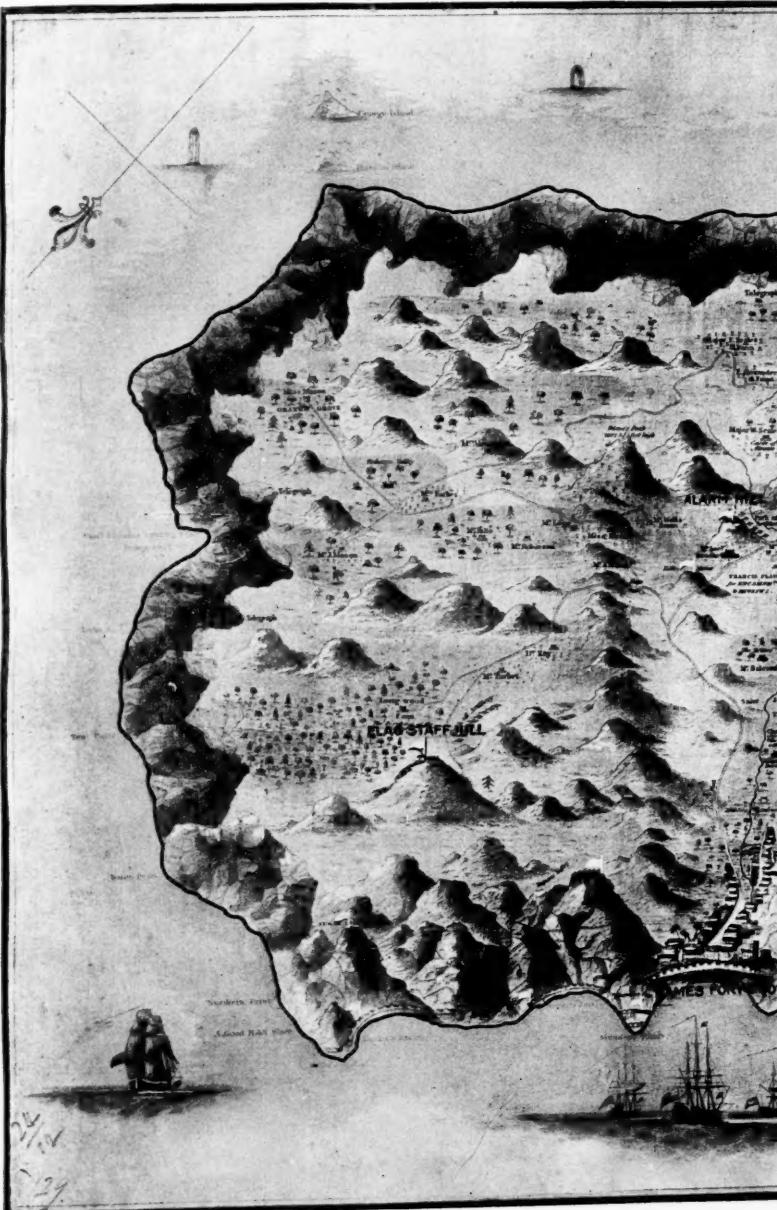
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SAINT HELENA
is Dedicated by permission to
F. G. Newdigate Esq. R. A. High Sheriff
The Duke of Kent and Strathearn
By Gen: R. P. Read



Scale of Miles
For Simile of Napoleon Bonaparte's Signature
When First Consul *Imperator*
When Emperor *Napoleon*

THE MUSEUM OF THE ROYAL UNITED SERVICE INSTITUTION, WHITEHALL

J. J. K & Co., Limited, London.

THE JOURNAL OF THE ROYAL UNITED SERVICE INSTITUTION.

VOL. LII.

MAY, 1908.

No. 368.

[Authors alone are responsible for the contents of their respective Papers.]

SECRETARY'S NOTES.

1. CORRESPONDENCE.

The Council desires to intimate that in future all the correspondence of the Institution, including that with reference to the Library, Lectures, and the JOURNAL (with the exception of those letters for perusal by the Editor only), should be addressed officially to the Secretary, and not to individual Members of the Staff by name.

2. OFFICERS JOINED.

The following Officers joined the Institution during the month of April :—

Major E. S. Nairne, R.F.A.
Lieutenant M. W. Graham, Royal West Kent Regiment
Major J. T. Hobbs, Australian Field Artillery.
Commander O. M. Makins, R.N.
Captain F. Moore, Royal Fusiliers.
Sub-Lieutenant J. E. Genge, R.N.R.
Captain A. W. Jennings-Bramly, 20th Hussars.
Lieutenant G. P. Russell, R.N.
Captain F. D. Russell, Indian Army.
Lieutenant R. S. Fletcher, Northumberland Fusiliers.
Captain W. S. Leslie, Indian Army.
Captain V. H. M. De la Fontaine, East Surrey Regiment.
Captain M. G. D. Rowlandson, Indian Army.
Colonel E. C. Ingouville-Williams, D.S.O., late Worcestershire Regiment.
Major P. G. Shewell, late Hampshire Regiment.
Captain E. L. Bond, R.G.A.
Captain W. N. Guthrie-Smith, Indian Army.

3. MAP ROOM.

There has been drawn up a provisional list of all maps and plans in the Map Room, dealing with naval and military battles, sieges, etc., which took place between A.D. 1543 and A.D. 1864. There are probably in works in the Library many interesting maps and plans of this period. The Library Committee would be much obliged if readers of these works, who may come across any such maps, will kindly bring them to the notice of the Library Staff for entry in the List.

The Council desires to record its indebtedness to Colonel Lonsdale Hale for his most valuable services in the compilation of this List. Members desiring admission to the Map Room must apply to the Clerk in the Library.

4. RECEPTION, MAY 20th.

Admiral-of-the-Fleet Lord Walter Kerr, G.C.B., and the Council, will hold a Reception in the Museum on the evening of Wednesday, 20th May. It is hoped a large number of Members and their guests will be present on this occasion, in view of the recent improvements in the Museum.

- a. In the Museum music will be rendered by the Band of the Coldstream Guards, and by the Choir of His Majesty's Chapels Royal.
- b. All Guests must be introduced by Members *personally*.
- c. The Dress will be Evening Dress, with Decorations and Medals.
- d. The price of Tickets for both Members and their Guests is five shillings each (to include Refreshments).
- e. All application for tickets must be accompanied by the payment.

5. ADDITIONS TO THE MUSEUM.

(1) The Field Trumpet used by Trumpet-Major Henry Joy, 17th Lancers, at Balaclava, on 25th October, 1854, to order the Cavalry Charge. Henry Joy was orderly trumpeter to Major-General the Earl of Lucan at the time, and the trumpet was subsequently presented to him by the Colonel and Officers of his Regiment, and is engraved "Presented by the Colonel of the 17th Lancers to Trumpet-Major H. Joy, on which the Balaclava Charge was sounded on October 25th, 1854."

In 1898 this relic was sold by auction at Messrs. Debenham, Storr and Son's rooms for 750 guineas to Mr. T. G. Middlebrook, and on 30th January, 1908, it was again under the hammer at the same rooms, and was purchased by Mr. W. W. Astor.—*Given by W. W. Astor, Esq.*

(2) The Medals of the above-mentioned Trumpet-Major Henry Joy, 17th Lancers, consisting of :—

- (a) The Crimean Medal with 4 clasps.
- (b) The Medal for Distinguished Conduct in the Field.
- (c) The Medal for Long Service and Good Conduct.
- (d) The Turkish Military Medal.

—*Given by W. W. Astor, Esq.*

(3) The Flag of the United States Frigate *Chesapeake*, taken by H.M.S. *Shannon* on 1st June, 1813:—

In the year 1813, the *Shannon*, 38 guns, Captain P. V. Broke, had for some time been watching the American frigate *Chesapeake*, of the same force in guns, but superior in the number of her crew, lying ready for sea, in Boston Harbour. The British Captain had sent a challenge to Captain Lawrence, of the *Chesapeake*, to come out and try the fortune of war, ship to ship; and about 1 p.m., on the 1st June, the American frigate weighed anchor, and stood out of Boston Roads to meet the *Shannon*. At fifty minutes past four the action commenced, the ships being not more than a stone's throw apart, Boston lighthouse bearing west at about six leagues distance. After the exchange of a few broadsides, by which the *Chesapeake* suffered considerably, her tiller ropes being shot away, and her wheel broken, she fell aboard the *Shannon*, whose anchor fouled the mizzen chains of her opponent. A sharp fire of musketry followed, when Captain Broke, observing the enemy to flinch from their guns, at the head of his boarders, sprang on the quarter-deck of the *Chesapeake*, exclaiming, "Follow me who can," and with slight resistance drove most of her crew below. The Americans kept up a heavy fire from their tops, till the men stationed in them were killed or driven on deck, and made a determined but fruitless attempt to rally, but in about fifteen minutes from the beginning of the action, all hostilities ceased, and the *Chesapeake* was the prize of the *Shannon*.

The loss of the victors was First Lieutenant Watt, two other officers, and twenty-three men killed, and Captain Broke and fifty-eight men wounded, out of a crew of 330 men.

The *Chesapeake*, out of a crew of about 386 men, had her Captain, First and Fourth Lieutenants, Master, Lieutenant of Marines, three Midshipmen, and fifty-three men killed or mortally wounded, and nearly ninety officers (including her Second and Third Lieutenants) and men wounded. Captain Broke being severely wounded, Lieutenant Provo. W. Wallis (afterwards Admiral of the Fleet Sir Provo. W. Wallis, G.C.B.) assumed the command, and with the two frigates sailed for Halifax, arriving there June 6th. The gallant Captain Lawrence had died two days before, on board the *Chesapeake*, and was buried by his opponent at Halifax, with all the honours of war.

The Flag was sold by auction on 30th January, 1908, at Messrs. Debenham, Storr and Son's rooms, and was bought by Mr. Astor for 850 guineas.—Given by W. W. Astor, Esq.

(4) The Crimson Silk Sash, worn by Lieut.-General Sir John Moore, K.B., at the Battle of Corunna, and stained with his life-blood. It was taken from his body on his death by his A.D.C. (Sir George T. Napier), and used by him to assist to lower the body into the grave. The description accompanying the sash is in the writing of Sir George Napier.—Bequeathed by General W. C. E. Napier.

(5) Specimen of the Deserters' Branding-machine, formerly used in the Army. This specimen belonged to the 95th Foot.—Purchased.

(6) Shoulder-Belt Plates of the Royal Artillery and 92nd Highlanders, used prior to 1850.—*Given by the Curator (Lieut.-Colonel A. Leetham).*

(7) Officer's Belt Buckle of the 30th Foot, used prior to 1881.—*Given by Lieut.-Colonel N. Bannatyne.*

(8) Four Specimens of Dollar Bills, used by the Southern Army during the American Civil War, dated 1864.—*Given by Captain M. Hancock, Royal Fusiliers.*

(9) Silver Medal struck to commemorate Captain James Cook's expedition of circumnavigation, dated 1772. Silver Medal struck by the Royal Society to commemorate Captain Cook's voyages.—*Given by C. P. Wilson, Esq. (late Royal Indian Marine).*

SECOND PRIZE ESSAY.

Subject:—

"THE BEST WAY OF ORGANISING AND MAINTAINING A RESERVE OF EFFICIENT BRITISH OFFICERS FOR THE BRITISH FORCES AT HOME AND IN INDIA, INCLUDING THE INDIAN ARMY."

By Lieut.-Colonel TELFER-SMOLLETT, late Worcester Regiment.

Motto :—
"Over Fork Over."

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INTRODUCTION.

IN a work entitled "The Army in 1906" the Right Honourable H. O. Arnold-Forster, M.P., after remarking that the supply of candidates for commissions in the Regular Army is sufficient to meet peace requirements, adds: "As regards the real need of the Army in war—the supply of available trained officers—the Army is seriously, and, indeed, dangerously, short. . . . The shortage has been placed by some authorities as high as 6,000, including the supply of the Indian demand, which the Indian Government is now taking steps to meet to some extent. This is an extreme figure; but in view of the waste of officers in any war, and of the excessive waste in a war in which partially trained troops are engaged, it would not be safe to reduce the total very greatly."

This estimate, it should be remembered, has been put forward by a statesman who, when Secretary of State for War, had the best professional advice in the Army at his command.

Startling as Mr. Arnold-Forster's figures at first sight appear, it is significant that the Right Honourable R. B. Haldane, his successor in office, seems to have formed an even more serious view of the situation, for he is reported to have stated in the House of Commons on 25th February, 1907, that on mobilisation no less than 4,000 additional officers would be required by the Regular Army and 6,000 by the second line or Territorial Army, as the Auxiliary Forces are apparently to be termed after re-organisation, making 10,000 in all.¹

Mr. Haldane may perhaps have had in his mind a more complete organisation for the latter than was contemplated by Mr. Arnold-Forster, necessitating an enlarged demand for officers. All such estimates, however, providing as they necessarily do, for the uncertain wastage of war, must to some extent be hypothetical, and hence will be subject to variation; but in view of the fact that figures of this magnitude are put forward by men holding positions of great responsibility, it is impossible to escape from the conclusion that a dangerous deficiency of officers would become apparent if we were ever to be engaged in a war of any magnitude.

After advancing his estimate, Mr. Arnold-Forster propounds two questions :

"How is this great deficit to be made up?"

"Or can it, in fact, be made up at all?"

As the function of a Reserve of Officers would be in emergency to meet every deficit, it will be necessary to make an attempt to formulate a reply to these questions.

ARRANGEMENT OF THE SUBJECT ADOPTED.

I purpose in the following pages to divide the discussion of the subject into two parts. In the first of these will be set forth the defects in the existing Reserve of Officers, described by Field-Marshal Earl Roberts, K.G., and other distinguished officers in their evidence before the Royal Commission appointed to enquire into the war in South Africa. This retrospect will by no means be of academic interest only, for it is essential that any conditions which may have tended to produce inefficiency or difficulty in the past should not be overlooked when formulating suggestions for the creation of a reformed and greatly augmented reserve.

It is almost certain also that however attractive the allurements held out in the future to young aspirants to reserve commissions, yet the flow of the latter would hardly be so ample as to render it possible to dispense entirely with the services of

¹ As this Essay must necessarily be to some extent retrospective, it has been convenient usually to employ the obsolete term "Auxiliary Forces" when dealing with the Militia, Yeomanry, and Volunteers. Since the above was written it has been announced that the Militia, generally speaking, is to retain its individuality.

the existing reservists, most of whom are retired military men in receipt of small pensions.

Moreover, the subalterns of a newly-constituted reserve might not improbably on a general mobilisation be associated in dépôts and provisional battalions to a considerable extent with the existing field officers and captains, and hence it is most desirable that these senior officers should be encouraged to set an example of proficiency to their younger colleagues. The best means of promoting the zeal and efficiency, therefore, of the senior officers of the reserve must be considered when making general proposals of reform.¹

A *précis* will be given of the suggestions made before the South African War Commission with reference to the methods which might be adopted for enlarging and conferring increased efficiency on the Reserve of Officers.

The Reserve of Officers in India and the possible calls thereon will be described, and the numbers available and required will be dealt with.

I shall conclude Part I. by briefly sketching the systems in vogue in Germany, Japan, and more particularly in Switzerland.

By the light of facts and theories thus set forth, and in some degree codified, an attempt will be made in the second part to ascertain how far it might be practicable to obtain under existing conditions a sufficient number of candidates for the reserve without prejudice to the Auxiliary Forces. The possibility of applying any degree of compulsion in particular cases will be discussed; the difficulties which at present exist in the way of obtaining additional reserve officers will be narrated, and the best means for overcoming these difficulties will be examined in detail.

The Colonies have been left out of consideration, as their resources would probably be exhausted in filling the commissioned ranks of their own military forces.

PART I.

THE EXISTING RESERVE OF OFFICERS AND THE DEFECTS WHICH BECAME MANIFEST WHEN THE RESERVE WAS CALLED OUT DURING THE WAR IN SOUTH AFRICA.

The Reserve of Officers, according to the Army List, consists at the present time of about 2,300 individuals, leaving out of consideration those above the rank of lieut.-colonel and also quarter-masters and riding-masters. This rather formidable total, however, must not be taken as representing the available strength of the reserve. The "Royal Warrant for Pay, Promotion, and Retirement of the Army" for 1906, which contains

¹ The Reserve of the Royal Army Medical Corps would appear to be beyond the scope of this Essay, and has therefore not been dealt with.

the regulations for the reserve, provides that officers can only be appointed thereto after retirement, whether from the Regular Army, Militia, Yeomanry, or Volunteers.

Until recently, however, officers actually belonging to the Auxiliary Forces were permitted to accept commissions in the reserve in addition to their commissions in the former; and there are some hundreds of individuals included in the reserve who at the same time are still serving in the Auxiliary Forces. These should not be counted twice over, and if they be deducted from the available strength, as well as those reserve officers who are employed as chief constables, governors of gaols, Colonial magistrates, etc., from which appointments they could not be spared, the total of 2,300 will be reduced to a little more than 1,800.

Most reserve officers are middle-aged and many have endured hardships either on active service or in unhealthy climates. It is reasonable to suppose, therefore, that the proportion of those medically unfit might be somewhat heavy—say 15 per cent. This latter deduction will bring down the effectives to from 1,500 to 1,600, and it seems probable that the reserve could not be counted on for any larger number.

It will be desirable, for reasons already explained, to now give a summary of the opinions expressed before the South African War Commission with reference to the defects which became apparent in the present system on the only occasion on which the officers have been recalled to the colours since the reserve was inaugurated in 1879.

Field-Marshal Earl Roberts, K.G., in his evidence before the South African War Commission, pointed out that the numerous additional officers who are required on the mobilisation of an army should be chiefly subalterns; but that the existing Reserve of Officers contained very few junior officers, and was principally composed of lieut.-colonels, majors, and captains.

Major-General Sir Coleridge Grove, K.C.B., also explained that most of the reserve are senior officers, or if not senior in rank, are usually no longer young men. Hence they are unfitted by their age to be subalterns or junior captains. Many of them also have been out of the Service for a long time, and are therefore more or less out of touch with the developments of military training and weapons, and have become unfamiliar with military law and routine.

Field-Marshal Sir Evelyn Wood, G.C.B., who was Adjutant-General of the War Office during the most acute crisis of the war in South Africa, informed the Commission that he was perfectly satisfied from a mass of correspondence in his possession that the officers of the reserve never contemplated being taken from their private business and compelled to serve to their great financial detriment for three years with a dépôt or provisional battalion; that he had to call up men against their will, and that he received piteous appeals from individuals thus forced, who stated that by being compelled to leave their

work in civil life they were being ruined; that in some cases the War Office was obliged to threaten officers in receipt of retired pay, that if they would not return to active service their pensions would be stopped.

Sir Evelyn Wood added that under such circumstances officers were not likely to work well, the more so as many of them had been away from military life for a great number of years. In spite of drastic measures in compelling the services of reserve officers, the shortage became so marked, Sir Evelyn Wood also told the Commission that one officer was obliged, without assistance of any kind, to pay, control, and, as far as lay in his power, to train about 850 cavalry soldiers, half of whom were located at Hounslow and the other half at Aldershot.

Referring to the lack of military knowledge on the part of reserve officers of artillery, Major-General Sir G. H. Marshall, K.C.B., R.A., stated that they were usually so out of date that they were only of value for service at depôts.

General Sir Ian Hamilton, K.C.B., remarked, in the course of his evidence, that a Regular officer who had left the Army because he was sick of it, and had been vegetating ever since, would not be likely to be very energetic or up to date when recalled to the colours.

RECAPITULATION OF DEFECTS IN EXISTING RESERVE.

It is obvious from the foregoing that the officers of the reserve, on the only occasion on which they have been recalled as a body to the active list, failed in four particulars:—

1. They were too senior in age and rank, there being hardly any subalterns amongst them, although the latter is the rank of which the greatest number is required on mobilisation.
2. Their numbers were too small.
3. They were rusty in military knowledge and were, generally speaking, out of touch with the Army.
4. Many individuals when called upon to rejoin the colours responded to the call with a considerable lack of enthusiasm, and subsequently displayed a rather languid interest in their military duties.

INFLUENCES WHICH CONTRIBUTED TO THESE DEFECTS.

These defects will now be dealt with in detail, but it must not be lost sight of that on the outbreak of hostilities about 300 members of the reserve at once volunteered their services. These were accepted, and it is, I believe, a fact that, generally speaking, these enthusiasts rendered good service at home or abroad, and in many cases in very responsible positions throughout the continuance of the war. It should also be noted that a fair proportion of the above had kept their military knowledge

up to the mark at great personal expense in the preceding years of peace by serving with the Auxiliary Forces. It will be necessary later to recur to this particular point. It was only when an increased demand for officers rendered a general call to arms of reservists imperative that the more grave of the defects mentioned above became prominently apparent.

1. The first of these, viz., the age and standing of the officers is, it is to be feared, inseparable from the present system, for the immense majority of the Reserve of Officers now serving are men who are compelled, as a condition of drawing a pension, or having accepted a gratuity, to serve in the reserve. Retired pay or a gratuity is not usually granted until an officer has completed at least fifteen years' service, *i.e.*, until he is 34 or 35 years of age, and liability to recall ceases at 45 for company officers and at 55 for field officers. We are thus confronted with the fact that with the exception of a few young men who join voluntarily (and who, as they usually hold rank at the same time both in the Auxiliary Forces and the reserve, may not always be available for duty in connection with the latter), the Reserve of Officers is composed of individuals aged from 35 to 55, *i.e.*, far too old, in most cases, to discharge a subaltern's duty with zeal.

The lack of subalterns and the difficulty which has been experienced in inducing young men in large numbers to serve in that rank in the reserve naturally leads to the second defect noted above, viz., 2, the comparatively small effective strength of the reserve. As this defect can only be overcome by a large influx of young blood, and as the best method of securing such an influx is the crux of the situation, its consideration must be reserved for the second part of this Essay.

3. As regards the third disability which attaches to the reserve officers, to wit, their general want of military knowledge, it is submitted that this is easily removable by official edict under certain conditions, pecuniary and otherwise.

As matters now stand, once an officer of Regulars quits his regiment for the reserve, no real opportunity is given him for keeping up his military knowledge, and hence, as years roll by, his acquaintance with military science becomes more and more foggy and out of date; and all connection with the Army being severed, many officers gradually lose their military instinct entirely, and eventually are led to regard themselves as civilians pure and simple. It is self-evident that a defect of this kind might with young reservists drawn from civil life produce results even more unsatisfactory than those which were developed as we have seen amongst ex-Army officers of middle age. Lack of military knowledge and sentiment can only be overcome by the institution of "refresher courses," which every reserve officer should be compelled or at least encouraged from time to time to pass through.

As I shall explain later on, a system exists in most Continental States under which reserve officers are obliged to rejoin

the colours periodically for instruction, and in the latter portion of this Essay the subject will be considered in detail.

4. I must now pass to the fourth defect, which, it is said, became manifest when the reserve was called out, viz., an occasional absence of zeal. I approach the subject with reluctance, knowing that I am treading on delicate ground, and would have altogether passed it by in silence, if it had been possible so to do.

It is hoped, however, that nothing that may be said in the course of this Essay will occasion the slightest annoyance or give offence in any way.

It will be gathered that many of the defects to which Sir Evelyn Wood and other officers testified, were not entirely attributable to any special peculiarity in the *personnel* of the reserve in 1899, but might, not improbably, be experienced even more acutely with an entirely different body of individuals, if steps were not taken in time of peace to guard against them.

Any lack of zeal which may in some cases have been displayed may, generally speaking, be ascribed either to misunderstandings with reference to the conditions of service applicable to reserve officers, or to a belief that these were lacking in liberality or to the sudden and overwhelming character of a crisis for which nobody was prepared, and against which the regulations in 1899 were perhaps hardly framed to provide.

It has been stated that reserve officers never believed that they would for months and years be taken away from their private business to perform military duty during the continuance of the war in South Africa, and hence they were not attuned to the self-sacrifice which was suddenly and unexpectedly demanded of them. The moral of this would appear to be that every means should be taken in peace time to keep reservists in touch with the Army, thus leading them to appreciate the fact that they are an integral portion of the Land Forces of the Crown. The lesson, however, by no means ends at this point.

As misunderstanding as to conditions of service appears to have exercised an influence antagonistic to ardour in 1899-1902, some enquiry as to the causes of any misapprehension which may have existed will not be out of place.

In the course of the investigation, however, it will be necessary to review some rather prosaic details. It is said, to quote one example, that owing to a mistaken belief, that unfortunately prevailed among certain reservists recalled to duty, the latter expected that they would be granted the full pay of their rank, in addition to their retired pay, and were much disappointed and discouraged in many cases at the very outset of their renewed military career because their remuneration was fixed by regulation at the rate of only £150 a year, in addition to their pensions, without regard to the rank of each individual.

The limits of this paper will not permit of a lengthy dissertation on controversial topics, but there are certain principles which may be broadly stated, and concerning which, it may be

remarked, that whilst some apply to retired military men only, the majority are applicable to all reserve officers alike.

On the one hand, no soldier can be allowed to plead ignorance of the regulations. On the other hand, it is desirable that the rules which govern the conditions of service, of individuals who are civilians first and soldiers afterwards, and who can only devote a little time to the study of military subjects, should be as simple and obvious as possible, and withal as generous, as the surrounding circumstances will admit. Without doubt, retired pay is granted not only as a reward for past service, but also as a retaining fee, to enable the State to claim an officer's service in emergency on advantageous terms for a certain number of years, and any annual grant which may be given in future to a younger class of reservists will doubtless be regarded in a similar light. Certain factors, however, must be taken into account. It is well known that an unmarried subaltern, in even the least expensive infantry regiment, cannot make both ends meet unless he is endowed with at least £100 a year in addition to his military pay; whilst in the more expensive infantry regiments and in the cavalry a far higher figure is necessary.

Accepting the lowest possible estimate, however, it is evident that it is impossible for an officer to exist in the Army, even if entirely without any encumbrances and under the most favourable conditions, with any less expenditure than £200 a year.

It would seem to be a matter for grave consideration, therefore, whether it is expedient, in the public interests, to impose inevitable hardship, with its resulting discontent, by compelling men with perhaps families dependent on them to serve in an emergency for any less amount. There are other points which should by no means be overlooked in dealing with reservists, and upon which it is therefore necessary to expatiate in an Essay treating with the subject.

For example, it is customary to pay men called in suddenly and temporarily in an emergency a higher wage than is given to workers whose services are permanently retained.

Reserve officers are only called out to meet sudden or temporary emergencies, and it is a question, therefore, whether, as admittedly temporary workers they ought not to be treated when required with special liberality. Again, the reserve officers of the future, the bulk of whom will be practically civilians, will engage in callings in civil life to a much greater extent than those who were called upon in the crisis of 1899-1902. A summons to arms renders it imperative on the part of a reserve officer that he should abandon any occupation in civil life with its accompanying emoluments, and might therefore be the means of ruining a promising career.

To a man who has given hostages to fortune in the shape of a wife and family, such a necessity must in any case press heavily. It is not suggested for one moment that the State

can reasonably be called upon to compensate its servants for indirect loss, but it is submitted that if the necessities of the State give rise to hardship, it is an unwise policy to accentuate such hardship by a lack of generosity.

The zeal of some of the reserve officers called out during the Boer war was, we have been told, damped by financial difficulties occasioned by their withdrawal from occupations not military; yet such difficulties were undoubtedly mitigated by the fact that the officers concerned were, generally speaking, retired military men, usually endowed with at least small private means, and also able to hypothecate a portion of their retired pay to their families. With the semi-civilians of a newly-constituted reserve their earnings in civil life would in most cases be their all, and on these ceasing on a prolonged term of military duty, it is to be feared that unless the State acted with generosity, those dependent on the departed reservists might in some cases be left in pitiable plight, with results disastrous alike to individual zeal and general efficiency.

Such a state of affairs may seem improbable in view of the liberal and patriotic course adopted by most employers towards those in their service who seven years ago proceeded on active duty to South Africa. It must not be forgotten, however, that there are hundreds, nay, thousands, of educated young men of the best possible material for reserve officers—barristers, solicitors, accountants, etc.—who being, in the slang of the day, "on their own," their incomes depend entirely on their personal and daily exertions. It is submitted that if a reserve of 10,000 efficient officers is to be called into existence, it will be necessary to keep in view the possible requirements and necessities of gentlemen thus placed. Officers of the reserve, who have not held commissioned rank in the Regular Forces, and who are not under the provisions of former Royal Warrants, holding commissions in the reserve in addition to their commissions in the Auxiliary Forces, have always been required to undergo annually a month's training with a Regular unit at their own expense. There were very few individuals thus qualified before the war, the majority of the reservists available being, as already stated, ex-Regular officers, who previous to 1899 had received no training whatever from the date of their withdrawal from the Service perhaps ten or fifteen years previously. These officers were in most cases unfamiliar, not only with the weapons, equipment, and system of drill, but also with the method of keeping military accounts, which latter is altered from time to time.

Any lack of knowledge as to the system by which soldiers' accounts are regulated may be the cause of great anxiety and even pecuniary loss to the officer concerned, for if any mistake is made and public money wasted thereby, the deficiency must be made good out of the officer's private resources. Many reserve officers held the belief whilst the South African war was in progress that however hard they worked, no recognition

would be accorded to them for their efforts in the public service.

This belief was, as the event proved, absolutely erroneous, for promotions were after the termination of hostilities bestowed on reserve officers on a generous scale; but if it had been previously apparent that good service would thus by no means be overlooked, it is probable that zeal would have been considerably stimulated.

The seeming anomalies and small grievances which militated against the efficiency of the reserve may have been and probably generally were apparent rather than real; and most of them might, in the light of cool reason and after-knowledge, appear trivial and even ridiculous. At the time, however, they no doubt created a feeling of soreness, and therefore tended to extinguish enthusiasm in the minds of men confronted by an altogether unexpected contingency.

DESIRABLE THAT RESERVISTS SHOULD BE GENEROUSLY TREATED, AND THEIR CONDITIONS OF SERVICE FREE FROM AMBIGUITY.

I have dwelt on this thorny subject with what I trust may not be regarded as undue insistence. I have ventured to do so, not for the sake of unearthing grievances dead, buried, and forgotten, but because it seems probable that conditions of employment which, on the authority of Sir Evelyn Wood, speaking as Adjutant-General, produced difficulty in the past, might, if unmodified, have a similar result in the future.

As explained by Sir Evelyn Wood, the majority of the reserve officers with whom he had to deal could be controlled through their pensions; but the comparatively youthful reservists of the future will be practically civilians, controllable through their goodwill and patriotism alone. If a sufficiently numerous and thoroughly efficient reserve is, in the absence of compulsory service, to be called into existence, it will be an absolute essential that the public purse should be opened, and opened widely; and, further, that the conditions of service should be so detailed and specified that misunderstanding by any reasonable being should be impossible.

Précis of SUGGESTIONS MADE BEFORE THE SOUTH AFRICAN WAR COMMISSION FOR RENDERING THE RESERVE OF OFFICERS MORE NUMEROUS AND MORE EFFICIENT.

It will now be necessary, at the risk of being somewhat prolix, to give a full *précis* of the opinions expressed by a number of distinguished officers to the South African War Commission.

In commenting on a proposal, which will be described in detail later, for largely increasing the number of officers of the Regular Army, Field-Marshal Earl Roberts expressed the opinion that in time of peace there would not be sufficient employment for these extra officers. The field-marshal added that

he would prefer to see a large number of officers passing through the Army into the reserve, rather than a permanent increase of those serving with the colours. He approved of officers going through courses of instruction, or otherwise usefully employed, being seconded, as in this way the number of officers actually serving with battalions and cavalry regiments would not be increased, but only the numbers of those passing through and available in war time. Lord Roberts appeared to think that if a young man possessed good ability and was well educated he might, with one year's training, learn enough military work to be of use as a reserve officer; and he stated that he would like to see some system inaugurated under which officers of Auxiliary Forces could be induced to serve, say, three months one year and six weeks the next, with the Regular Army, so as to enable them to master their military duties.

These officers would receive pay when thus called out for duty, and together with some civilians, also trained as officers, might be formed into a reserve.

It might be necessary to grant all those included in such a category a retaining fee over and above the regular pay that they would be entitled to as an inducement to them to be always ready when required. Under such an arrangement a certain number of officers would be thoroughly trained every year, and in the course of ten years a considerable body would be available, not too old to act as subalterns. In Lord Roberts's opinion the supply of a sufficient number of trained officers was one of the greatest difficulties which the military authorities would have to face on the outbreak of war. "How reserve officers are to be obtained in sufficient numbers and with the requisite qualifications is, I confess," said the field-marshall, "a problem which so far I have been unable to solve."

Lieut.-General Sir Ian Hamilton, in alluding to the difficulty in providing a Reserve of Officers, suggested that officers of the Regular Army should be permitted to go for a period of several years into the Militia as seconded officers, keeping their places in their regiments. He believed that such an arrangement might sometimes suit the private convenience of officers if their regiment were going abroad, and they had a family in a certain stage of existence, for it would enable them to serve with a Militia regiment on half pay whilst keeping their places in their own unit, so that they could return to the active list if they so desired after serving for a certain period with the Militia.

Sir Ian Hamilton explained that his suggestion would increase the total number of officers, as the places of those temporarily attached to the Militia would of course be filled up in the Regular Army, and he further pointed out that this increase would be effected in a less costly way than if extra officers were kept on full pay with their Regular regiments. The idea that the Reserve of Officers should be actually serving, *i.e.*, that the permanent establishment of the commissioned ranks

in the Regular Army should be doubled, might be good from a purely military point of view, although it was doubtful whether so many extra officers would have enough to do; but no country could stand the expense of keeping up full effectives for an emergency which might happen once in 50 years.

Sir Ian Hamilton expressed the belief that to recruit the Reserve of Officers the authorities should tap an entirely new supply, such as the teachers in the secondary and elementary schools, many of whom are very fond of practising a little military training with their boys. He had spoken to a certain number of masters on the subject, and it might be very easy for the War Office to enter into some arrangement with the Education Department by which teachers might be given some small extra remuneration if they kept up a cadet company, and were officers of it, and also undertook to go to Aldershot for two or three months to learn military work.

They might be expected to gain an insight into the latter very quickly, being, generally speaking, clever men. Moreover, in the discharge of his scholastic functions a schoolmaster necessarily gains two most important qualifications which every officer should possess, viz., the habit of enforcing discipline and the power of imparting knowledge.

Major-General Sir Coleridge Grove, K.C.B., was secretary to the Commander-in-Chief at the outbreak of the war, and on him, therefore, the responsibility rested for the supply of officers during a critical period.

He expressed an emphatic opinion, that unless our system is changed with regard to the commissioned ranks, we can never be prepared for any large extra demand, because an officer is the one thing that it is absolutely impossible to improvise. If he is to be of value in emergency he must have been trained beforehand; hence, in order to meet the demand on mobilisation, there should be some kind of reserve on which to draw. General Grove also explained that the existing Reserve of Officers is only useful up to a certain point.

The wastage of the war, the number of officers required on the lines of communication, for extra staff appointments, and for duty with Colonial Irregulars, produced such a demand that between 1st January, 1900, and midsummer, 1901, Sir Coleridge Grove had to provide over 3,000 officers in excess of the normal supply for the British Army. This did not include any officers for the Auxiliary Forces. He had to meet this demand from many directions; but in the first instance turned to the Militia and Volunteers, and commanding officers were requested to recommend their best men for appointment to the Regular Army, the result being that just at the time the Militia was embodied and stood in the greatest need, some of its most promising young officers were taken away. If the Militia and Volunteers are to be of value in the hour of need the reverse process should be possible, and they should be helped by having good Regular officers attached to them. The Auxiliary Forces

are always so short of officers that any drawing on them of the kind described is very severely felt.

"It appears to me," added Sir Coleridge Grove, "that the only way in which you can meet this difficulty is by having with your various military units in peace a very large excess of the officers that are absolutely required for duty connected with each unit. You must have your reserve serving, if I may use the expression; you cannot let your officer go back to civil life . . . and leave him there to forget what he knows; or if you do he will not be as good as he ought to be when he is called up. You ought to have with all your Regular Forces at home . . . at least twice their present establishment of officers, especially in the junior ranks. . . . At present I should say that this is the only way I can see by which you can meet the very great demand there is for extra officers whenever you are engaged in any war, and by which also you will be able to help the Auxiliary Forces. The fact of having this large number of officers at home would enable a good many of them to be always away from their unit attending classes of instruction and obtaining certificates which would affect their after career, or with their affiliated Militia or Volunteers."

Sir Coleridge Grove's views, which, if carried out, would increase the establishment of the Regular Army by about 4,000 officers, appear to have been shared to a large extent by Field-Marshal Sir Evelyn Wood, G.C.B., and by General Sir Archibald Hunter, K.C.B. General Sir Thomas Kelly-Kenny, G.C.B. whilst advocating an increase of six additional officers for each infantry unit and three additional for each cavalry unit, explained that even such an increase of establishment would not in case of war be sufficient to provide for dépôts and details at home. He also mentioned that a scheme had been under consideration by which young men not connected with the Service in any way would be provided with uniform, would be given a month's training, and would then be passed into the Reserve of Officers.

Sir Thomas Kelly-Kenny described this plan as a makeshift, but added that it was the least expensive that could be adopted. It might, however, injure the Auxiliary Forces, as a young man might elect to join the reserve instead of the Militia, Yeomanry, or Volunteers.

Major-General the Right Honourable Lord Chesham, K.C.B., pointed out, with special reference to the Imperial Yeomanry, that colonels and squadron leaders should possess local influence, and be thus in a position to induce recruits to join the ranks.

In some instances officers thus endowed might not be experts at training men in the short available time. It would be hard to bring an officer from outside, because he was more highly trained, over the heads of men who were doing good service in recruiting, and Lord Chesham therefore suggested that a number of supernumerary officers, irrespective of rank,

should be allowed in each regiment; these would come out for training, and would constitute a Cavalry Reserve of Officers. This reserve would be recruited from officers who had served in the Regular Army and had retired.

He added that the question of rank keeps a great many officers out of the Yeomanry who would otherwise be very useful for training the men, and that retired officers should be allowed to join the Yeomanry in the rank which they held in the Regular Army.

He believed that if such an arrangement existed a captain would willingly perform a subaltern's duty if he were called captain and merely attached to the Yeomanry. For example, an officer so placed would probably not object to command a troop, which is a subaltern's position, and his so doing would greatly improve the training of some 25 men.

Major-General Sir G. H. Marshall, K.C.B., suggested that a reserve might be formed of officers who had left the Army comparatively early in life. These might be induced to join such a reserve by being allowed to wear their uniform and retain their rank, whilst their knowledge of Service matters might be kept abreast of the times if they were allowed to train with the Militia every year. Sir G. H. Marshall appeared to share Lord Chesham's opinion that the officers in a category such as that suggested should return to the active list on mobilisation with the same rank in which they had retired from it; and he believed that in war time there would be little difficulty about rank, for he had known majors of artillery who had come back to duty and been commanded by men who had been their subalterns, but no unpleasantness whatever had arisen in such cases.

Major-General Borrett, C.B., who during the early stages of the war held the position of Inspector-General of Auxiliary Forces, informed the Commission that so great was the shortage of officers that one regiment of Militia of two battalions, both of which were embodied, had only eight subalterns instead of twenty-four, and quoted several other examples of a similar character.

General Borrett's evidence has an indirect but important bearing on the proposed increase of the Reserve of Officers owing to the fact that the cause to which he attributed the deficiency of officers of the Militia might operate also against the recruitment of the reserve. The General appeared to think that candidates were kept back by the fear of out-of-pocket expenses, and very distinctly expressed the belief that the shortage of Militia officers was due to the fact that gentlemen's sons had not so much money to spend as in former days.

Major-General Sir A. E. Turner, K.C.B., R.A., at one time Inspector-General of Auxiliary Forces, shared the belief that the expense involved deterred young men from accepting commissions in the Auxiliary Forces.

The Right Honourable St. John Brodrick stated that in consultation with Lord Roberts and other military authorities he had formed the opinion that our regiments are already pretty fully officered for peace time, and that it would be difficult to find occupation for a large additional number of officers all the year round. Moreover, the cost would be very serious of adding a sufficient number of extra officers to the Regular Army to meet all requirements on mobilisation.

Mr. Brodrick agreed with Sir Coleridge Grove's estimate, that about 4,000 additional officers would be required in a great emergency, and he added that a scheme for forming a reserve had been under consideration, under which commanding officers of Regular units would be allowed to recommend young men who would be required to serve with the colours for six months or longer on leaving school. After this training, young men would enter their professions in civil life, but would remain *à la suite* the regiment with which they had trained without further attendance for four or five years, and during that period they would have the privilege of wearing the uniform of the regiment, and in case of mobilisation they would be called up to the active list at once.

Mr. Brodrick explained that this scheme had been suspended for the time being, as it was feared that such a system might attract young men to the reserve at the expense of the Militia and Volunteers. The right honourable gentleman further remarked, with reference to the difficulty in getting a sufficient number of officers for the Auxiliary Forces and the reserve: "It is a very serious question. I think that it is one of the most difficult questions that we have to deal with."

It will be gathered from the foregoing that expert opinion points emphatically to the conclusion that unless adequate provision against emergency be made in the quiet days of peace, embarrassment similar to that experienced during the South African war, but far more acute and dangerous, will be encountered if we are ever unfortunately confronted by a first-class military Power.

METHODS BY WHICH A SUPPLY OF TRAINED OFFICERS TO MEET EMERGENCIES MIGHT BE PROVIDED.

It is evident from the summaries of evidence quoted that there are two entirely distinct systems, the introduction of either of which might be attempted with a view to providing a sufficient supply of officers to meet all possible emergencies. The first and perhaps simplest of these would consist in having the reserve at all times actually serving; in other words, to so increase the number of officers of the Regular Army serving in the United Kingdom that on mobilisation every battalion, battery, or squadron would be able to spare enough officers to make up all deficiencies in the Auxiliary Forces and to furnish the extra men required with the Regular Army for transport, signalling, ammunition columns, special service, etc.

The second plan would be founded on an arrangement under which a number of young men would be passed through the Regular Army, their retention therewith being only sufficiently lengthy to enable them to get a fair knowledge of military work.

After this period of training they would enter their professions in civil life, holding themselves liable, however, during a certain number of years to recall to the colours in case of emergency.

With regard to the first of these expedients, it should be remembered that on the whole service in the Regular Army is very popular with young men, and hence it is probable that the number of officers therein might be very greatly increased without very much difficulty, especially in the artillery and infantry, the cavalry being a more uncertain factor. Moreover, if the reserve were always serving, a high standard of efficiency of the officers employed, even in an emergency, would be assured, for with all, military work would be the one occupation of their lives, and individuals permanently employed would necessarily be more thoroughly familiar with military matters than outsiders brought in suddenly from the cares of civil life whose military knowledge would necessarily in many cases be somewhat superficial. There is one consideration, however, which weighs heavily in the balance against this plan, viz., the tremendous pecuniary burden which it would impose on the tax-payers.

Even in the days when the enthusiasm aroused by the operations in South Africa was still unabated, grave doubts as to its feasibility were expressed, and now that the attention of the nation at large has forsaken military matters, and economy and retrenchment in the national armaments are the order of the day, it is almost impossible to conceive that any Government would have the courage in peace time to seriously propose the heavy addition to the Army Estimates which would be rendered necessary by the augmentation of the Regular Forces by thousands of additional officers.

With reference to the second plan which has been mentioned, viz., the training of a number of young men destined for callings in civil life by passing them quickly through the Army and requiring them afterwards to hold themselves liable for recall in emergency, it is to be noted that some system of the kind is usually in force in other countries, and it is probable that if such an arrangement could be instituted on the right lines in the British Empire, a solution of the existing difficulty might have been found. Apart from the two principal systems indicated there are various schemes for minor reforms which might prove very valuable to a certain limited extent, and which, therefore, must not be lost sight of.

In this latter class may be included the proposals that Regular officers should be allowed to serve for a few years with the Auxiliary Forces, receiving half pay and retaining their places in their own regiments whilst so doing, and also that

officers quitting the Regular Army at a comparatively early age should be encouraged to join units of the Auxiliary Forces as supernumeraries with their Army rank.

The suggestion advanced before the Commission, that for the Reserve of Officers the military authorities should tap an entirely fresh supply, and should endeavour to enlist the services of the masters of elementary and secondary schools, is most important and might have far-reaching advantages, which will be dwelt on later.

THE INDIAN RESERVE OF OFFICERS.

It will now be necessary to describe the existing Reserve of Officers in India, and to explain how very far the number of officers available from this source is inadequate to meet eventualities. Officers who have entered the Indian Army since January, 1892, and have retired on a pension are liable to recall to duty in India.

According to the Army List for January, 1907, the number included in this category only amounts to nine.

The Indian Army Regulations also provide that the following officers and gentlemen may, if they so desire, be granted commissions in the Indian Army Reserve:—

- a. Officers who, having retired from the Indian Army, are not liable for further service.
- b. Officers who have retired from His Majesty's other Regular Forces and are not liable to recall under War Office rules.
- c. Indian Volunteers.
- d. Officials other than military officers in the service of the Government of India.
- e. Private gentlemen residing in India.

The inducements offered to gentlemen possessing any of the above qualifications do not appear to be sufficient to attract a large number of candidates, and the Indian Army List for April, 1907, contains the names of 12 lieutenants and 27 second-lieutenants serving voluntarily in the Reserve of Officers in India. These totals include both cavalry and infantry. The total reserve for India, therefore, apparently only musters 48 officers in all from every source.

In an exceedingly able Essay, which was awarded in 1898 the Gold Medal of the Royal United Service Institution of India, Major (now Brigadier-General) Mullaly, C.B., R.E., arrives at the conclusion, as a result of a very carefully-prepared calculation, that for the mobilisation of a force in India of only 60,000 men, at least 300 extra European officers would be immediately required, whilst a further 200 would be necessary to make good the wastage of hostilities for one year. As matters stood nine years ago, therefore, at least 500 additional officers

would have been required to mobilise and maintain for twelve months so small a force as 60,000 men. There are several factors in this matter which must be carefully weighed.

On the one hand, since 1898 the number of European officers in units of the native army have, generally speaking, been increased from 9 to 12; moreover, a still further increase of establishment, calculated to add upwards of 300 additional European officers to the Indian Army is in progress.

On the other hand, the wars in South Africa and in Manchuria have thrown a lurid light on the destructive power of the most modern weapons. The size of the armies engaged in the latter campaign has proved conclusively that if a serious attempt is ever made to invade India by a great military Power, not 60,000 but five or six times that number at the very least will be necessary to frustrate the enterprise.¹

Lord Roberts reminded the South African War Commission that the Indian Army would require on mobilisation an even higher proportion of additional officers than the Home Army, because it is in India that the British officer suffers; and he added that in the event of the Indian Army being engaged in a big war it would certainly be necessary to send out a large number of officers from England.

The vital necessity of a sufficient supply of British officers for ensuring the efficiency of native troops is forcibly summarised by Brigadier-General Mullaly, who, after quoting in support the opinion of the late Field-Marshal Sir Patrick Grant, proceeds: "The British officer is still and ever must be the main-spring of our military organisation, the soul of our infantry, and unless a sufficient number be available when required, the object for which the Indian Army exists, viz., the defence and security of the Empire, cannot be held to rest on a secure basis."

In view of these pronouncements it will be desirable to attempt to form a rough estimate of the drain on the commissioned ranks which might arise in the defence of the Indian Empire by the light of *data* gathered from South Africa and Manchuria.

It must be premised, however, that any estimate thus formed must be entirely approximate, for the difficulty of forming reliable deductions is greatly increased by certain conditions. For example, officers destined for duty with native troops must have special qualifications, which will be described anon; but generally speaking, about twelve only of the officers in a native unit would be Europeans, the rest being natives. Then, again, for a big war in India a large number of complete units would certainly be despatched from home or from the Colonies, and these, as well as the European units quartered in India, would

¹ In a speech in the House of Lords on 25th June, 1907, Lord Roberts is reported to have expressed some doubt as to whether 300,000 men would suffice for the defence of India.

have the deficiencies in their commissioned ranks made good from the Home Reserve of Officers.

The average strength of the Army during the South African war was about 250,000, and it is by no means improbable that a force even larger than this might be required for the defence of India.

From the outbreak of hostilities in the autumn of 1899 to the conclusion of peace in May, 1902, i.e., for a period of about two and a half years, 1,072 regimental officers were killed in action or died from wounds or disease in South Africa, whilst 1,851 were wounded.

This by no means represents the total waste, for no less than 3,116 officers were invalidated home to England as a result of sickness or wounds.¹

If the number of deaths be added to the invalidated we have the formidable total of 4,188, representing the total loss of officers in two and a half years—an average annual wastage of 1,675.

As already shown, in a native unit only two-fifths of the officers are European, and probably at least one-half of any army which might be called upon to defend India would consist of native troops.

The casualties amongst European officers in an Anglo-Indian Army composed of half European troops and half of native, and numbering 300,000 men, would therefore amount, if only on exactly the same scale as South Africa, and allowing for the comparatively small number of European officers with native units, to 3,500 in two and a half years, or, in round numbers, to 1,400 in one year.

It must not be forgotten, however, that European officers, when leading native troops, would, generally speaking, be more conspicuous, and consequently more liable to be picked off by the enemy's marksmen than if they were in command of men of their own colour. Again, the available statistics from Manchuria lead to the conclusion that in the campaigns of the future the loss in the commissioned ranks will be heavy, and probably twice as high in proportion as with the rank and file.

Thus at the battle of Mukden alone the total casualties among the Russian officers amounted to 2,457, whilst the aggregate number killed, wounded, and missing in the course of the campaign only fell sixty short of 5,000. In addition, 3,474 officers either died in hospital or were invalidated back to Russia.²

In view of these latter figures, it will be obvious that to allow 1,400 or 1,500 officers to replace the wastage of a year in a war waged for the defence of our Indian Empire would be to make an exceedingly moderate estimate.

Previous to the augmentation of the European officers which has been effected during the last ten years, it was com-

¹ South African Despatches. Cd. 990.

² Official statistics published in the *Russki Invalid*.

puted, as we have seen, that 300 additional officers would be required for 60,000 men mobilised on the frontiers of India, or a total of 1,500 for 300,000 men. If so large a force as 300,000 men were ever to be thus massed, it would certainly contain many units sent direct from home, and these latter would, as previously explained, be completed from the Home Reserve of Officers.

Still, whilst making every allowance for this fact, and for the recent increase in the commissioned ranks of the Indian Army, it is scarcely possible to conceive that a general mobilisation of all the troops permanently quartered in India could be completed unless some 900 or 1,000 extra officers were available on the spot. The large majority of these would probably be required for the lines of communications and other special work, in which they would have natives under their control. Of the 1,400 or 1,500 officers necessary to meet the first year's wastage, about a third would be absorbed by native units.

It would seem, therefore, that a Reserve for the native Indian Army could hardly be deemed effective unless it mustered 1,200 European officers at the lowest possible estimate. All such estimates, however, as already stated, must necessarily be of the roughest character. Reserve officers, destined for duty with native troops, should be endowed with a knowledge of the dialect spoken by their men, or of Hindustani, and they should understand the native character and disposition.

NUMBER OF RESERVE OFFICERS REQUIRED AND AVAILABLE.

There are several difficulties which present themselves when any attempt is made to formulate a definite and intelligible scheme for the creation of a Reserve of Officers. These, being inseparable from the conditions of existence of the Empire, must be confronted.

The reserve cannot be homogeneous, for although all its members alike should have a knowledge of military work, yet for those destined for duty with the native regiments of India, the further qualification of familiarity with the native character and language are deemed by experts to be essential.

On the other hand, the possible demands of the Army in India cannot be treated on an altogether separate basis from those of the Home Army, for although special qualifications would be required in officers whose duty might lie with native troops; yet it would not be necessary that those intended for the augmentation of British units serving in India should be similarly equipped, and hence the latter might be drawn from the Home Reserve.

The fact that nearly 4,000 officers are required to complete the peace establishments of the Auxiliary Forces greatly complicates the situation. Were it not for this deficiency, not only would a smaller reserve be necessary, but also on mobilisation it would be possible to restrict the call on reserve officers to the

performance of their legitimate functions. As we have seen, these should be limited to providing the numbers of officers additional to the peace establishment required on mobilisation and to meeting the wastage of war. As matters now stand, however, the reserve would be required on a general call to arms to fill vacancies in peace establishments which in a normal state of affairs ought not, theoretically, to exist.

The Reserve of Officers, to be thoroughly effective, must be sufficiently numerous to meet the tremendous strain which would arise in the by no means impossible contingency of a simultaneous mobilisation at home and in India.

Briefly, therefore, in the event of a war with a great military Power the function of the reserve would be as follows:—

1. To provide the additional officers immediately required on mobilisation for the Regular Army at home. Lord Roberts informed the Norfolk Commission that 2,000 would be necessary for this purpose.
2. To supply the wants on mobilisation of the European troops in India.
3. To fill vacancies in the garrisons at Malta, Gibraltar, etc.
4. To fill all vacancies in the Auxiliary Forces in the United Kingdom, amounting at the present time to between 3,000 and 4,000, and to provide the extra officers required on mobilisation.
5. To meet the wastage of war in the commissioned ranks which would arise during a year's hostilities. The latter is rendered necessary by the fact, acquiesced in by all authorities, that an officer cannot be trained in less than twelve months, and hence that a clear year would be required for the instruction of a new generation. On the Indian Army Reserve of Officers would devolve the task of meeting similar demands from the native army.

When we consider that the present effective strength of the Home Reserve cannot be placed much above 1,500, and that of the Indian Reserve stands at 48, it will at once be apparent that a great and dangerous deficiency exists in the commissioned ranks of the British Army.

THE RESERVE OF OFFICERS IN GERMANY.¹

It will now be desirable to sketch the organisation and system of training for reserve officers which prevail in foreign countries, and I will deal in the first instance with those of Germany.

¹ Compiled from "Handbook of the Military Forces of Germany."

The outlines which follow will be of value, inasmuch as they will indicate the degree of training which is considered essential to maintain efficiency. At the same time it must be borne in mind that the bedrock of these systems is compulsion, and as this most potent agent at presents finds no place in the institutions of the United Kingdom, these descriptions must be regarded to some extent as "gospels of perfection," which we can only hope to apply in so far as the essentially different conditions will admit.

Every German, except the members of certain princely families, is liable to military service from 17 to 45 years of age. Young men, however, are not called upon to serve until they are 20. Their lives from 20 to 45 are divided, from a military point of view, as follows. In the Regular Army and its reserves from 20 to 27; in the 1st Levy of the Landwehr from 27 to 32; in the 2nd Levy of the Landwehr from 32 to 39; and in the Landsturm from 39 to 45.

Young men who reach a certain standard of education and who engage to clothe, feed, equip, and in the mounted services to mount themselves, obtain the privilege of being transferred to the reserve after one year's service instead of three, and are called "one-year volunteers." It is from this category that most reserve officers are obtained, although the reserve also contains a few retired officers of the Regular Army.

An officer of the reserve, after passing the necessary tests, is, generally speaking, compelled to serve therein from 21 to 27, during which period he is liable to three trainings of from four to eight weeks each.

At 27, reserve officers can either be transferred to the 1st Levy of the Landwehr or can remain in the reserve until they have completed their whole period of military service. Between the ages of 27 and 32 they are liable to two trainings of from eight to fourteen days each.

From 32 to 45, officers, whether of the reserve, the 2nd Levy of the Landwehr, or of the Landsturm, may attend for training if they like, but they are not compelled to do so in time of peace. All officers, when undergoing periodical training, whether voluntary or otherwise, are granted the pay and allowance of the Regular Army. The rate of remuneration in the German Army is nominally less than in the British Army; but, as is well known, the German officer is very much better off, pecuniarily, than his British confrère, his unavoidable expenses being far smaller. This point is of importance, as showing that even when a Government is endowed with the power of applying compulsion to reserve officers, it may be considered expedient to treat the latter with reasonable liberality.

THE RESERVE OF OFFICERS IN JAPAN.¹

"One-year volunteers" are encouraged in Japan on much the same lines as in Germany. If, however, a young man,

¹ Compiled from "Handbook of the Military Forces of Japan."

whilst possessing sufficient education to pass the necessary examinations, is too poor to defray the cost of one year's colour service, the State steps in and grants him pecuniary assistance. One-year volunteers receive a special military training, beginning at 20 years of age, and are primarily intended to provide officers for the 1st and 2nd Reserves.

In the 1st Reserve they remain for two years, and they then pass to the 2nd Reserve, in which they serve for a further period of five years; after this they may be transferred to the National Army, in which they remain until 40 years of age, or in some cases to a much later age. The Reserve of Officers also includes a certain number of promoted non-commissioned officers who have passed the necessary examinations. In peace time reserve officers are called out every two years for a training of five weeks' duration. From this training, however, are exempted Government officials who cannot be replaced and Members of Parliament during the Session.

Officers of the reserve and of the National Army are promoted by selection. Since the war with China it is esteemed a great privilege to hold rank in the Reserve of Officers in Japan.

THE OFFICERS OF THE SWISS ARMY.¹

The Swiss Army is a Militia Force, based on the principle of universal liability to military service. The nature of the service demanded from the officers thereof is similar to that which would be required from reserve officers in this country if efficiency is to be maintained.

Every Swiss citizen is liable to military service for a period of 25 years, beginning when he is 20 years of age. The exact duration of the period of training is at present under revision, but up to the present every man, whether destined for the commissioned ranks or not, undergoes during his first year of service a recruit's course, which, in the case of the infantry has lasted for 45 days, in the cavalry for 80 days, and in the artillery for 55 days.

On the completion of his first year a man is passed to the Elite or Active Army. If in the cavalry he has been compelled to go through a ten days' course every year for ten years, whilst in the infantry and artillery the period of service has been twelve years with a compulsory training of sixteen and eighteen days in alternate years respectively. On leaving the Elite, men pass to the Landwehr, in which they complete their period of military service, being required to present themselves every fourth year for five or six days' training. Officers are required to undergo the same courses of instruction as the men, but in addition are compelled to gain special proficiency by attendance at a series of extra courses, with the result that during an officer's first

¹ Compiled from "Handbook of the Swiss Army."

twelve years of service he has to perform military work on 440 days in all. The demands made are very severe, the day's work frequently extending to as much as nine or even ten hours.

It should be noted that the report of the Norfolk Commission states that "the training given to the Swiss officers may be taken as the minimum received in any country by the officers who form the framework of an Army."

PART II.

DIFFICULTY IN DEALING AT THE PRESENT TIME WITH THE QUESTION OF A RESERVE OF OFFICERS.

A carefully prepared and most exhaustive scheme for the creation of an efficient Reserve of Officers has recently been placed before the public.

It contains within itself the details necessary for the formation, payment, and training of a well-organised reserve, and is the product of careful thought by some of the best brains in the kingdom, having at their disposal sources of information which cannot be readily accessible to the world at large. Under such circumstances any private individual can only approach the subject with a feeling of considerable diffidence. Moreover, as the approved details of the new force are gradually unrolled, fresh features are disclosed, and the author of an Essay on the formation of a Reserve of Officers writes in 1907, under the depressing consciousness, that his most carefully thought-out plans may be anticipated by official edict before they see light, and that dearly cherished objects which he fondly believed to be entirely original may have been forestalled by other minds and embodied in authoritative decrees before he has scarcely put pen to paper.

It is to be feared, therefore, that many of the suggestions which follow will inevitably appear to be somewhat belated.

THE PROBLEM TO BE SOLVED.

At a rough estimate some 10,000 reserve officers are, on the highest authority, now necessary for the national security. The existing reserve could hardly be counted on for more than 1,500 or 1,600 officers at the outside; and we are at once brought face to face with the fact that the services of some 8,500 young men are urgently required, sufficiently educated and intelligent to be able to exercise command, sufficiently zealous to master thoroughly the rudiments at least of military art, sufficiently self-denying to sacrifice periodically a portion of their leisure to keeping up their military knowledge, and sufficiently patriotic to face the possibility of a call being made on their services which might compel them to suddenly abandon the vocation in civil life, by which alone they could hope to gratify their legitimate ambition or even to earn their bread.

With all this they must be endowed with robust constitutions, and must be content with a somewhat subordinate position in the military world. The manly instincts of the rising generation will doubtless render it possible for this call to be eventually met; nevertheless, it would probably be necessary to deal with such a corps of officers, when formed, in a generous and sympathetic spirit if numbers as well as efficiency were to be maintained.

RESPONSIBILITY WHICH ATTACHES TO A RESERVE OFFICER.

The attainment of a standard of military knowledge sufficient to qualify him as a leader of men is the first and most obvious, but by no means the most serious responsibility which attaches to a reserve officer. Looming behind, and far more grave in its possible incidence, is the obligation which he assumes of forsaking his vocation in civil life at a moment's notice on a call to arms, even if his so doing may occasion the greatest distress, both to himself and to those dependent on him. It is beside the question to quote the analogy of any foreign country. If compulsory service exists, all have to bear a share in the national defence when danger threatens; all men of a certain age are situated and treated exactly alike, and the hardships of a sudden call to arms are divided equally amongst all, and there is no escape for the selfish and unpatriotic. It is not difficult to realise the disastrous results which might accrue to a man of perhaps 27 or 28 years of age who was mounting the lower rungs of the ladder of success, and who was hurried away to military duty in an emergency and compelled to abandon the field in civil life to his more cautious or more unpatriotic competitors who had declined in bygone years to assume the responsibilities of a commission in the reserve.

To ensure the popularity of the Reserve of Officers as a permanent institution in this country, it is essential that the regulations governing the force should be framed, as far as may be, in such a manner as to ameliorate hardships of the kind contemplated. To prevent misunderstandings also such regulations should be made subject to change as rarely as possible.

HOW ANY HARDSHIP RESULTING FROM THIS RESPONSIBILITY MIGHT BE AMELIORATED.

It will not be forgotten, that at the outbreak of the South African War, some hundreds of the existing Reserve of Officers at once proffered their services, which were accepted with advantage, both to the State and to the individual; clearly showing that in any body of men there are a considerable number of individuals whose circumstances in private life are such that a sudden summons to military duty inflicts no hardship upon them, and is, on the contrary, welcomed as a diversion from the monotony of everyday life. Advantage might be taken of

this fact to divide the members of a newly-constituted reserve into two *categories*: the *first* of these to be entirely composed of officers who had registered their names as being at all times willing to render military service. In the *second category* might be included those who, whilst joining the reserve in fulfilment of a moral debt due to their country, were so situated that prolonged duty with the colours could only be undertaken at great personal loss or inconvenience. Under such a system the first brunt of a call to arms would devolve on those who were best qualified to bear it. Officers in the *first category* would be the first to rejoin the Army, and would be the last to quit the active list, on the conclusion of hostilities.

The strength of a reserve, it must be remembered, should be sufficient, both for the needs of a general mobilisation at home and abroad, and for the wastage of twelve months of warfare.

If the mobilisation were only partial, or if the campaign were only brief, it is possible that the requirements of the situation might be met to a great extent by the officers of the *first category* of the reserve, and those in the *second category* might thus be spared, or at least afforded breathing space, to put their affairs in civil life in order. Transfers from one category to the other should be permitted.

To the wives and children of all non-commissioned officers and men of the reserve, what is termed as a "separation allowance" is granted during the whole period that the husband and father is compelled to absent himself from his family for military duty.

The concession of a similar boon to the wives and children of reserve officers would appear to be but equitable, and such a concession, if on a sufficiently generous scale, might be the means of averting much hardship and even misery from helpless ladies and children. The want of some provision of the kind made itself felt to a limited extent between the years 1899 and 1902. The reserve officers then called out, however, were able, for reasons which I have before dwelt upon, to make some provision at least for their families, with the result that the latter, though in many cases not left in very opulent circumstances, were at least shielded from penury. It was fully explained also, in the first part of this essay, that pecuniary limitations might attach to the reserve subalterns of the future, which would, if the latter were required for a prolonged term of military duty, render official provision for their wives and families necessary, or, at any rate, most desirable. Lastly, if any reserve officer, not entitled to retired pay, were to be compulsorily retained on military duty, for such an extended period that his career in civil life might have been seriously compromised, it would appear to be just that he should be accorded the option of permanent employment in the Regular Army; being appointed to the latter, not necessarily to the rank of second-lieutenant, but to the same rank that he had held in the reserve.

THE CLASSES FROM WHICH RESERVE OFFICERS MIGHT BE DRAWN.

It has hitherto been generally recognised that every aspirant to a commission, whether in the Regular or in the Auxiliary Forces, must be sufficiently pecuniarily endowed, to enable him to be out-of-pocket, as a result of his connection with the army, without financial disaster. In other words, the scale of pay and allowances has been based on the assumption that these will be considerably supplemented by the private means of each officer.

In view of the enormous deficiency which now exists, it would seem to be a matter for grave consideration whether this time-honoured tradition can possibly be adhered to, in the case of the Reserve of Officers, if an adequate number of young men are to be attracted thereto. In his evidence before the South African War Commission, General Sir Ian Hamilton, as previously narrated, expressed the conviction that for the Reserve of Officers we ought to tap an entirely new supply. He added that, as a result of enquiries amongst a certain number of masters of secondary and elementary schools, it had struck him that if some small remuneration were granted, many of these gentlemen might be induced to qualify themselves in military knowledge, and might be of great use in case of emergency as reserve officers.

Elementary schoolmasters would, as a body, have special facilities for acquiring military knowledge. Admirably organised Volunteer companies are a feature in many of the Training Colleges, in which they are prepared for the scholastic profession; and several of these have exhibited a very high degree of proficiency in competitions, which are open to units of the Volunteer Force.

The scheme recently promulgated by the War Office provides that, on the Continental standard, each reserve officer should have military instruction for one year before being granted his commission, the period being the same, whether for the cavalry, artillery, or infantry; but a step further is taken, and it is officially suggested that if a youth has done well for two years in the Cadet Corps of any public school, such as Eton, or Harrow, he will be excused four months out of the twelve months' instruction to which he would be liable, before being eligible for the reserve; moreover, if he proceeds to a University, and gives a further two years' service in the University Volunteers, and obtains the requisite certificate, the year's military training necessary to qualify him for the reserve will be still further reduced by four months, making a total reduction of eight months, for service in school Cadet Corps and University Volunteer Corps. These units will practically be converted into training schools for candidates for the reserve; and the school and university authorities will apparently be granted subsidies, to enable them to provide instruction in the military art, as an addition to the regular curriculum.

The extension of some adaptation of this system to the training colleges for elementary and secondary schoolmasters would be but a slight advance on the reforms already officially approved, and would open up an entirely new source, from which reserve officers might be drawn.

In many elementary schools, Boys' Brigades or Cadet Corps are in existence; and where this is the case the masters have every facility for keeping up their knowledge of drill and tactics, whilst the daily routine of maintaining discipline and imparting instruction during school hours must unquestionably tend to qualify them to exercise command.

The one and only obstacle which exists to the general application of the system indicated, lies in the deplorable dislike and distrust of things military, which still lingers in some localities, and which, if special precautions were not taken, might be engineered to the detriment of any master who held a commission. Such short-sighted intolerance could only be gradually eradicated by the inclusion of the principles of patriotism in the syllabus of instruction of every school in the land. I shall recur to this subject at greater length.

The extension of the field of recruitment for the Reserve of Officers should not, however, be limited to schoolmasters alone. If the reserve is to be raised to, and permanently maintained at, an establishment of 10,000, and efficiency is to be insisted upon, it is almost certain that the official net will require to be widely spread, and no possible source from which candidates might be drawn should be neglected.

The officers of the British Army have hitherto, generally speaking, sprung from families of a certain social status, and in view of the splendid services which have been rendered in the past by men thus obtained, there is a reluctance in many quarters to the introduction into the commissioned ranks of a novel element. It can scarcely be expected, however, that a demand, not for hundreds, but for thousands of additional officers, can be met from what is after all a very limited class; and it is to be noted that even in countries in which compulsion is resorted to, it has been found impossible to obtain reserve officers entirely from the higher social strata.

There is in the United Kingdom a large and intelligent middle class—the young men of which are to be met with neither amongst the officers nor amongst the rank and file of the Army, the Yeomanry, and the Militia, and who have only been attracted to the Volunteers to an exceedingly limited extent.

Many of Napoleon's most brilliant leaders were sprung from this middle class, and if the regulations for the reserve were made sufficiently attractive and sufficiently comprehensive it is submitted that in this country a large number of reserve officers might be drawn from it with great advantage, both to the State and to themselves.

Young men of this social grade have hitherto, as a body, held aloof from the military forces of the Empire, partly from

fear of the expense in which they might be involved, partly from a natural dislike to plunging into an unknown world, amongst associates with whom they might have little in common, and partly from the strong prejudice against the Army, which still lingers in the minds of many estimable people who are to be found in the middle classes. If any considerable number of young men could be drawn into the Reserve of Officers from the latter source, two distinct objects would have been attained. The first, that the number of vacancies would, of course, be reduced; the second, and far more important, that an inroad would have been made into the citadel of that prejudice against the Profession of Arms which has reacted injuriously on the national interests in the past, and which, if unchecked, may bring disaster in the future. To accomplish the object proposed, every effort should be made to establish Volunteer Corps where none now exist in all technical, engineering, agricultural and science and art colleges, and every facility and financial encouragement should be given to the students at these establishments to qualify themselves for the reserve on the lines which have been suggested for the undergraduates at the universities.

It will be remembered that General Sir Thomas Kelly-Kenny, the Right Honourable St. John Brodrick, and other witnesses before the Commission, pointed out that the tendency of a Reserve of Officers might be to attract candidates from the Auxiliary Forces, and thus, so to speak, "to rob Peter to pay Paul." If, however, as above suggested, an entirely fresh source could be opened for the recruitment of the reserve, the existence of the latter could not be detrimental to the other branches of the Service, and a very serious difficulty would have been removed from the path of military reformers.

Distinguished authorities have advocated various minor measures calculated to augment the reserve, or at any rate, to add to the total number of available officers.

For example, officers who have quitted the Service so early in life that they have not been entitled to any retiring allowance, and hence cannot be compelled to join the reserve, might be induced to do so voluntarily, if it were open to them to be attached as supernumeraries to units of the Auxiliary Forces in the same rank as that which they held in the Regular Army, and they were granted a small retaining fee, in addition to the usual allowance for camp, for every year that they did duty with the Auxiliary Forces, and thus kept their knowledge up to date and held themselves liable as reserve officers. Again, officers of the Regular Army might be permitted to serve for a limited number of years with the Auxiliary Forces, receiving half only of their military pay whilst so doing, but retaining their positions as supernumeraries in the Regular units to which they belong, and being permitted, if they wish, to return to the Regular Army on the expiration of their period of service with the Militia or with the Territorial Army, into which the present Yeomanry and Volunteers, together with a few units of the Militia, are eventually to be moulded.

A limited number of very useful recruits might be selected from amongst the pensioned warrant and non-commissioned officers of the Regular Army.

The only fault of these men is one which they share with the retired commissioned officers who compose the majority of the existing reserve, viz., they are usually middle-aged, and hence would be rather unsuited for the duties of subalterns.

On the other hand, officers drawn from this class would be valuable in positions of special responsibility, and if a slight increase were to be made in the pension of any warrant officer or sergeant who was selected for a reserve commission, and who had served in the Reserve of Officers for a certain number of years, it is probable that many of them would gladly join.

It will now be well to consider the possibility of bringing any form of judicious pressure to bear in the case of certain members of the community.

THE POSSIBILITY OF APPLYING COMPELSSION IN SPECIAL CASES.

Many hundreds of well, and indeed highly, educated young men are employed in the various Government offices both in London and the provinces.

It has been suggested that, inasmuch as they are the servants of the public, and are not, generally speaking, overworked, it would be no undue interference with the liberty of the subject if they were required to occupy a small portion of their leisure in military training; and the advocates of this limited form of compulsion point out that the Reserve of Officers might afford a most appropriate sphere for these young men. No proposal of the kind would have a chance of acceptance unless it met with the approval of the majority of the senior members of the Civil Service, and it is impossible for any private individual to gauge the sentiments of these latter gentlemen.

Against the proposition it might be urged that in times of national danger and excitement the services of all officials in the Government departments would most probably be required to meet the increased strain which might be thrown on the civil administration of the kingdom; in favour of it, it might be remarked, that if a hostile raiding force had landed anywhere on our shores, those of the general public who are in the habit of inundating the authorities with a ceaseless flow of questions would have their thoughts too fully occupied to be able to propound conundrums as to the amount of their income-tax or the miscarriage of their letters, and hence that the clerical work in many of the departments might be greatly reduced in a national crisis.

The most fatal objection probably which could be made against compelling Civil Service clerks to join the reserve would be that it would be rather arbitrary to single out one class alone as objects of a form of compulsory service from which all their fellow citizens would be exempt.

There is another means, however, by which the gentlemen referred to might be encouraged to accept commissions.

Admission to the Civil Service is gained by undergoing certain examinations, in which each candidate must obtain, in order to ensure success, a high standard of efficiency in certain specified subjects.

Now, without exercising the slightest compulsion in the matter, it would be open to the Government to ordain that military drill and tactics were to be considered as one of the subjects that might be taken up for entrance to any public office; and, further, that aspirants who had passed the necessary examinations to qualify for the rank of second lieutenant of the reserve should be credited with the marks gained therein when their places in the Civil Service entrance examinations were being determined.

THE RESERVE OF OFFICERS FOR INDIA.

The Army Regulations for India provide that officials, other than military officers, in the service of the Government of India may be enrolled in the Indian Reserve of Officers, but no special inducement to join has been held out, and no attempt whatever has apparently been made to bring pressure to bear on these gentlemen.

There are reasons which would seem to render it specially desirable that Civil Servants in India should have some military training. They are surrounded by an enormous alien population, differing in every conceivable way from themselves in religion, colour, and habits. The rule of Great Britain in India has been defined as a benevolent despotism, having in reserve the power of the sword. It would seem not inappropriate, therefore, that those who administered British rule under these conditions, although civilians in time of peace and under all ordinary circumstances, should yet be endowed with some military training and experience. There are some strong arguments against this theory, which have been ably voiced by Brigadier-General Mullaly in the essay already referred to, wherein he points out that in the event of a serious attack being made on India, the Civil Servants of the Crown would be "the individuals whose discretion may stem a rising flood of revolt, calculated to hamper the armies in the field, and who will have to give the first warnings which will enable the storm to be weathered; hence the Civil Officer who is trained to govern the people and to discover first symptoms of discontent will be more profitably employed in performing his legitimate functions than in taking up unfamiliar and subordinate duties in the field."

Against this view, which no doubt is weightily supported, it may be urged that as a Reserve of Officers should be principally composed of young men, only the most junior Civil Officials in more or less subordinate positions could find a place therein; and, further, that as a matter of fact many civilians in the

Government service were employed in purely military duties in the critical days of the Mutiny.

To quote one out of many examples of this, Colonel Mallinson records in "The Indian Mutiny" that Mr. R. H. W. Dunlop, Magistrate and Collector at Mirath, organised a volunteer troop of cavalry from the European refugees at that station, and so actively did he proceed with the mounting, drilling, and arming that the troop was ready for duty in a very short time, and afterwards rendered good service in the field.

Splendid as were the deeds of this kind rendered by Indian civilians in all parts of the affected area, it is difficult not to believe that they might have been even more effective if all such officials had been subjected to military training for a few months on their entrance to the public service, and had been compelled to keep their knowledge up to date during the first few years of their official life by means of "refresher courses" of instruction.

With the Indian, as with the Home Civil Service, no project for compelling the junior members to become reserve officers would have a chance of success unless the approval and co-operation of their seniors had been obtained, and the vital question whether such co-operation would be forthcoming or not could alone be answered in response to official enquiries. It is submitted, however, that the possibility of a little gentle pressure being applied to Government officials in India as well as at home ought not to be forgotten if other expedients for filling the reserve should prove ineffective.

There remains to be considered the feasibility of obtaining a certain number of recruit officers from amongst the private individuals located in India: lawyers, merchants, tea planters, and so on. Gentlemen thus employed are eligible under the Indian Regulations for appointment to the reserve; but few of them appear to have accepted service therein, and no determined effort appears hitherto to have been made to attract them. It is possible, however, if advantageous terms were offered to all such gentlemen on the lines which will be suggested presently for the Home Reserve, that a certain number might be encouraged to qualify themselves. A proportion of the private gentlemen living in India may have passed through school or university Volunteer corps before quitting their native land, and hence it might be possible to substantially reduce in many cases the full period of military training necessary for a reserve officer on the system already briefly described, and which has been officially approved in principle for the Home Reserve.

Both Government officials and private individuals living in India would understand the native character and language, and with military training would be eminently qualified to lead native troops. It is hardly possible to conceive, however, that they would be available *under entirely voluntary conditions* in sufficient strength to meet all the requirements of the Native Army, both for a general mobilisation and for a year's hostilities,

and the project for the completion of the necessary number, which in the existing state of affairs offers most prospect of success, is to allow a limited number of junior officers serving in European units of cavalry and infantry in India to be attached to native units of the same arm for a period of a few months, granting them the extra allowances of the Indian Army as an inducement to volunteer during the period that they were attached.

A certain percentage of officers of European regiments would thus be enabled to gain some experience of the interior economy of a native unit and of the language and caste prejudices of the native soldiers. Such officers would, after being initiated into these details, rejoin their own units; but they would be regarded as a reserve for the Native Army, and would as far as possible be each ear-marked for the particular native battalion or cavalry regiment to which they had been attached for instruction. In fact, if this system were thoroughly established, the Reserve of Officers for the native troops would in time of peace be actually serving with the European troops in India. There are about 60 infantry and cavalry units quartered there, and if five or six subalterns or junior captains in each had thus qualified there would be from 300 to 400 available.

The weak point of any plan of this kind would be that on mobilisation the commissioned ranks of the European units in India would be depleted by the requirements of the Native Army just at the very moment when the need for the services of all officers would be most acutely felt as much with European as with native troops.

This constitutes a grave blot in such a system and might produce great inconvenience if not carefully guarded against.

The only possible means of providing against the evil—and the remedy would be but partial—would be to have a corresponding number of officers at home ear-marked for the European units in India, and ready to embark for duty in India at any time with a few hours' notice.

Such officers would form a special section of that first category of reserve officers at home, the formation of which has been already advocated, and which would be composed of officers selected for inclusion therein on the ground that they would be willing to hold themselves at all times ready for military duty at short notice.

The most weighty argument which can be adduced in favour of the scheme outlined above is that it is the only one that promises the slightest prospect, as matters now stand, of attaining the object in view and raising the Indian Reserve of Officers to some approach to the requisite standard of numbers and efficiency. It appears at best, however, to be in the nature of a makeshift, and it would seem not improbable that the only true solution of the difficulty would be to recruit to the Indian Reserve of Officers by some means all young men joining either the Civil Service, the Public Works Department, the

Police, or the Forest Department, and to retain them in the reserve for a certain limited number of years after their entry into the public service, their military liability, however, being brought to a close before any position of serious responsibility could have been attained in civil official life.

THE AMOUNT OF TRAINING NECESSARY FOR EFFICIENCY.

The demands made upon reserve officers in Germany and Japan have already been explained, and are typical of those imposed by all the great military Powers.

To recapitulate, a year's service in the ranks as a "one-year volunteer" is followed by the imposition of certain tests in technical knowledge, and if these are surmounted by the candidate he is appointed a subaltern of the reserve. He is then permitted to follow his vocation in civil life, but his knowledge of military matters is not allowed to rust, and he is compelled to present himself for training periodically. The duration of these "refresher courses," as they are sometimes termed, and the frequency with which they have to be undergone vary in different countries; but, speaking generally, they are biennial during the first few years of a reserve officer's service, and vary in length from one to two months, whilst both the frequency and duration of these courses are reduced as the reservist advances in years, until at a certain age—usually about 32—they cease to be compulsory, the older men being nevertheless encouraged to keep their knowledge abreast of the times, and being afforded facilities for so doing until their liability to military service comes to an end, *i.e.*, usually until they are from 45 to 55 years of age.

In Switzerland the system is in many respects unique; the so-called Regular Army or Elite closely resembling in the conditions of service the Militia or Landwehr of other countries.

Even under this modified system, as we have seen, each officer has to perform military duty between the ages of 20 and 32 on no less than 440 days. It will be remembered that the amount of training required from a Swiss officer appears to have been regarded by the Norfolk Commission as the minimum consistent with efficiency.

It will now be necessary to carefully consider how nearly it might be possible in this country to approximate to the standards above described. It is hardly necessary to remark that it is most desirable that the conditions under which military training is imparted to reservists, whilst aiming at thorough efficiency, should yet be so moulded as to interfere as little as possible with the work in civil life of individual officers.

Even the powerful lever of compulsory service will not necessarily produce efficiency amongst reserve officers, unless the system under which their military knowledge is first imparted, and afterwards kept up-to-date, is carefully graduated and intelligently carried out.

Previous to the war between Russia and Japan, the Russian reserve officers were not only deficient in numbers, but were also, in many cases, lacking in technical knowledge and general education, the method of instruction having been radically defective, and the system of "Refresher Courses" intermittent, and, in some cases, non-existent.

As a result, many officers were found to be wanting in military spirit, and showed the greatest repugnance to re-joining the colours; the lack of discipline thus displayed being the cause of much difficulty and friction.

CONDITIONS UNDER WHICH THE REQUIRED TRAINING MIGHT BE IMPARTED TO SUBALTERNS OF THE RESERVE.

There seems to be every probability that in this country, as with the Continental Powers, and with Japan, twelve months' training will be demanded from every candidate for the Reserve of Officers.

Good service in School and University Volunteer Corps, however, will probably be accepted in lieu of eight months out of the twelve, and hence the period to be spent with the Regular Army as a preliminary to obtaining a commission in either the Home or Indian Reserve, will presumably, in most cases, amount to four months only.

The manner in which this period of four months may be occupied will unquestionably have a most vital influence on the efficiency of reserve officers as a whole. The first and most natural assumption would be that each candidate should, during this four months, be schooled in military work with the unit in which he aspired to eventually hold a commission *à la suite*. There are several points to be considered in regard to this very important subject.

The responsibility of commanding and other regimental officers is already somewhat considerable, in connection with the efficiency of the men under their command, most of whom, in the United Kingdom, at any rate, are very young soldiers, requiring the utmost amount of careful supervision.

It would seem somewhat doubtful, whether the army as a whole would be benefited if the attention of regimental officers were to be in any degree distracted from their legitimate work by imposing upon them the duty of schooling an indefinite number of candidates for the reserve.

The one aim and object of every commanding officer, and of those who assist him, should be to raise to, and maintain his command at the highest possible pitch of military perfection; and the less his attention is distracted from that aim—as it certainly would be, if he were compelled to school reserve candidates against time—the more possible its attainment becomes.

The instruction of aspirants to the reserve must, owing to the limited time which will be available, be carefully graduated and carried through, under very high pressure, and might,

under such conditions, be anything but advantageous to the battalion or regiment to which they might be attached.

On the other hand, it is most desirable that reserve officers should have been previously associated, if possible, with those with whom they would have to co-operate on emergency, and should, generally, be familiar with the amenities and routine of regimental life.

To meet all requirements it is suggested that schools of instruction for reserve candidates should be established on somewhat similar lines to the Guards' School for Officers of Auxiliary Forces at Chelsea. The course at the latter admirable institution has hitherto been limited to one month only. The courses at the proposed schools for reserve officers of infantry should extend to three months, and might, therefore, be of a much more comprehensive and extended character than that at Chelsea.

Candidates from School and University Corps would rarely be possessed of any practical knowledge of cavalry or field artillery; and, hence, it is probable that the duration of the courses of instruction at Reserve Officers' Schools for those arms might have to be prolonged beyond the limit of three months.¹

The instructors at institutions of the kind suggested would exist for one purpose, and for one purpose only, viz., the training in the best possible way of the students passing through their hands.

It can hardly be doubted that the instruction of a particular class of individuals, such as reserve officers, could be better carried on in establishments especially designed for the purpose, rather than with regiments or battalions, the commanders and officers of which have to bear on their shoulders the weight of other and, perhaps, antagonistic responsibilities.

After thus undergoing a sufficiently arduous course, candidates might complete their labours and gain a practical insight into regimental life and interior economy, by serving for one month with the particular unit to which, after receiving their commissions, they hoped to belong, *à la suite*. British officers have been accustomed to regard themselves, to some extent, as military "Jacks of all trades," and, no doubt, to the great advantage of the Service, have been always ready in emergency to do duty in any capacity—with transport or mounted infantry—with machine guns or the supply department.

In the case of reserve officers, it would seem to be unreasonable to expect the same versatility; and, hence, it would be well, if their efficiency is to be secured, that they should be encouraged to specialise, as far as possible; in other words,

¹ A candidate for an Infantry Commission, who had not served for the prescribed period, both with a School and with a University Corps, would also be required to go through an extended course at a Reserve School.

each reservist should be taught to regard himself as an infantryman, or as a cavalryman, or as an artilleryman, or as a transportman, pure and simple, and nothing more.

The reservist having completed his preliminary training, and having been granted his commission as a second-lieutenant, would naturally pass into civil life, and the question must now be considered as to how his knowledge and military spirit could best be kept up to the mark, without unduly encroaching on the time which he must devote to the vocation by which he would be making a living. It will not be forgotten that the lack of any pre-existing system of periodic training caused inconvenience with the retired professional officers, who constituted the reserve during the Boer War, and would be even more severely felt by somewhat hastily-trained young men, who were not professional soldiers.

The idea of an annual "Refresher Course" at once presents itself as a simple solution of the difficulty. Now, so far as I can discover, it has not been customary, even with those nations which enforce compulsory service, to call on reserve officers to rejoin the colours every year; the courses of instruction are usually only biennial, during the earliest stages of a reservist's existence; and as years roll by, the call is apparently made as infrequently as once in four years. If such care for individual convenience is displayed by Governments, who have absolute power over their citizens, it would be wise, perhaps, to display equal leniency in this country; and to, therefore, only compel each reservist to present himself for 15 days' training once in two years.

All subaltern officers should be encouraged to come out every year; and those who enrolled themselves in the first category, as being always ready for military duty, should, of course, be compelled to attend annual trainings; such annual trainings taking place, either with the units to which they belonged, or with a Reserve Training School. Officers, who might elect to come out for training once in two years only, should be compelled to always undergo their course at a School of Instruction, the work at which would be carried through on much severer lines than with a battalion or regiment.

Regiments serving in India are composed of comparatively old soldiers, their establishments are higher than those of units at home, and the number of reserve officers to be trained would be very limited, hence it is possible that the necessary instruction might be imparted regimentally, the formation of Indian Reserve Training Schools being thus obviated.

All reserve second-lieutenants should be eligible for promotion to the rank of lieutenant, after three years' service; and subalterns of the first category should be eligible to be captains after 9 years' service, those of the second category after 12.

As an ample supply of senior reserve officers can be obtained from the pensioned officers of the Regular Army, it would probably be possible to dispense with the services of

officers recruited from other sources after 15 years' service. Those who had rendered thoroughly satisfactory service, and who had completed a certain period in the first category, might be eligible for the rank of major on retirement.

**THE CASE OF RESERVE OFFICERS WHO HAVE SERVED IN THE
REGULAR ARMY AND THEIR PROBABLE POSITION
IN THE FUTURE.**

When the reserve was called out in 1899-1900, some officers appeared to have forgotten their military knowledge, and had apparently ceased to regard themselves as soldiers. Military science advances rapidly in the present day, and an officer, after a few years' absence from the army, if no opportunity is afforded him of keeping his knowledge up to the mark, is apt to display an ignorance which is injurious to the service, and disconcerting to the individual.

The advantage of keeping reserve officers in touch with the Service, was well demonstrated in 1899-1900, for those who had previously, of their own free will, served with the Auxiliary Forces, fell into their places on recall with much greater facility than their colleagues who had been leading a purely civilian life.

It is customary in most Continental countries, not to compel men of 32 years of age and upwards to undergo training in time of peace; but reserve officers of middle age are encouraged to do so.

This policy might be followed in dealing with the retired military men now serving in the reserve. These latter should be allowed to train with a unit for fifteen days once in two years.¹

It would be of trifling cost to the State, and would remove all reasonable ground for discontent, if officers in receipt of retired pay were, in addition thereto, to be granted the full pay and allowances of their rank when serving either for a "refresher course" or for permanent duty in an emergency. A great stimulus to exertion would also be afforded if it were to be officially decreed that reserve officers of this class, attending regularly for periodical instruction, and exhibiting zeal and proficiency when so doing, should be considered eligible for a step of rank by brevet, after each period of ten years spent in the reserve; such advancement being irrespective of, and additional to, any promotion which might be conferred in respect of special service performed in an emergency.

It has been pointed out that the subalterns of a re-organised reserve would necessarily be brought in many cases into close

¹ The "refresher courses" of those destined to hold position on the Staff would take place in the office, over which, on a mobilisation, they would be called upon to preside.

contact with the retired military men, who would constitute the bulk of the field officers and captains, and might—and probably would—be influenced by their example. It is most desirable, therefore, that every precaution should be taken to secure the efficiency of these latter officers.

THE DANGER OF YOUNG MEN BEING TEMPTED TO JOIN THE RESERVE OF OFFICERS IN PREFERENCE TO THE AUXILIARY FORCES.

If entirely new sources of supply are tapped, as already suggested, for the reserve, the risk of the latter organisation proving a formidable competitor to the Auxiliary Forces or new Territorial Army would be very materially reduced. There is another consideration involved. The disposition at present appears to be towards placing reserve officers on a different footing from their confrères of the Auxiliary Forces.

An intention has been evinced to treat the former, if not with generosity, at least with sufficient liberality, to guard them against any out-of-pocket expenses in time of peace; and if this policy is adhered to, it will confer on reserve officers a marked pecuniary advantage over the rest of the officers of the land forces.

Under such circumstances it might be not altogether inappropriate if the military instruction of reservists were to be, generally speaking, conducted on more strenuous lines than are deemed advisable in the case of the annual camps of the Militia, the Volunteers, or the Yeomanry, the officers of which usually suffer considerable pecuniary loss as a result of their connection with the army.

It is said that the day's work at a Swiss Federal School mounts up to 9 or even 10 hours out of the 24. Without attempting to emulate such a pitch of diligence in this country, it might be not unreasonable to require a reserve officer, in view of the fact that all his expenses would be fully met by the State, and an honorarium also granted to him, to devote as much time, when engaged in military work, to the performance of his duties as would fall to the lot of gentlemen employed in any great financial or business house, in London or elsewhere.

Young men, who join the Auxiliary Forces at considerable personal outlay, although ready at all times to carry out much good work, without receiving any recognition from the bulk of their countrymen, yet, very naturally, regard the camps of their regiments, to some extent, in the light of annual outings, during which a considerable amount of military duty is harmoniously blended with occupations of a less arduous character.

It is improbable that officers of this stamp would, generally speaking, forego the undoubted social pleasures of regimental life, in favour of joining the Reserve of Officers, even if they gained considerably, in a pecuniary sense, by so doing, if the

fact was fully recognised, that owing to the limited time available, the military training of reserve officers must necessarily be carried out under very high pressure.

It is submitted, therefore, that the recruitment of the reserve officers would not act injuriously on the commissioned ranks of the Auxiliary Forces, if entirely fresh sources of supply were tapped for the benefit of the former, and if, also, it were clearly understood that reserve officers, although fully recompensed for their services, would be expected in return to work extremely hard when undergoing military instruction.

OBSTACLES WHICH MIGHT DETER YOUNG MEN FROM JOINING THE RESERVE OF OFFICERS, AND THE BEST MEANS OF REMOVING THEM.

Before concluding this paper, it will be necessary, both to review the causes which might deter young men from joining the Reserve of Officers, and to endeavour to suggest means for their removal. Such antagonistic influences might have their origin, in some instances, in a perhaps not altogether unintelligible dislike to incurring pecuniary loss, in addition to personal responsibility.

In many cases, however, they would probably arise from that extraordinary indifference to, and ignorance of, military matters, which is very prevalent, and which is so remarkable as to be almost astounding. Considering the vital importance to every man of the safety of the Empire, it is difficult to realise the indifference to the whole subject which is freely displayed by thousands of educated persons.

Broadly speaking, the Land Forces of the Crown, however designated, must necessarily range themselves into two main classes, composed: the first, of those who are professional soldiers; the second, of those who, being employed in military work for but a few days or weeks in the year, are civilians first and soldiers afterwards. Reserve officers, like those of the Auxiliary Forces, obviously belong to the second class, and many of the influences, therefore, which prevent young men from accepting commissions in the Auxiliary Forces would, presumably, militate against their joining the reserve.

A careful examination of all available evidence points to the conclusion that the causes which have hitherto checked the flow of recruit officers to the Militia, Yeomanry, and Volunteers are as follows:—

1. Dread of incurring expense.
2. Fear that the calls of military duty might interfere with vocations in civil life.
3. Indifference to military matters.
4. Dislike to anything connected with the army.

THE DREAD OF INCURRING EXPENSE.

Inability or unwillingness to incur pecuniary loss is probably the most potent, and is certainly the most reasonable, of the deterrents which collectively prevent young men from accepting commissions.

Major-General Sir Alfred Turner, K.C.B., speaking with some years' experience as Director-General of Auxiliary Forces, informed the Norfolk Commission, with special reference to the deficiency of officers of the Auxiliary Forces, that they could get excellent officers "from the poorer classes of professional and other men, who cannot join because of the expense. If the country chose to give them money to cover all their expenses, we should get a large number of officers." Sir Alfred Turner added: "If we can pay we shall get what we want."

It will be remembered that a somewhat similar view was expressed before the South African War Commission by Major-General H. C. Borrett, C.B., who had also had experience as Director-General of Auxiliary Forces.

I propose to discuss the question of expense from a somewhat homely standpoint, which, I trust, may not be deemed unworthy of the dignity of the subject.

For some years the writer, being intimately associated with a certain unit of the Auxiliary Forces, had occasion to observe that it frequently happened that zealous and efficient officers of the Corps, having entered into the State of Matrimony, shortly afterwards resigned their commissions.

On being asked their reasons for so doing, they almost invariably replied that their wives did not wish them to serve on.

Being keenly interested in the subject, I ventured in several cases to approach the ladies whose influence was causing loss to the Service.

In the first instance, I was usually put off with the remark that they did not like to give up the society of their husbands on Saturday afternoons, or for the week of the annual camp. I pressed on each lady's attention, with, I trust, not undue insistence, the fact that although the Corps might claim a few days of her husband's leisure in the course of the year, yet that there were social functions connected with the Officers' Mess which could hardly fail to be agreeable to any lady, and which might, therefore, be taken into her consideration; and I further ventured to point to the calls of patriotism. The reply I invariably received may be summarised as follows:—

"We are not rich people, and are obliged, therefore, to make our income go as far as possible. My husband's out-of-pocket expenses annually, in connection with the Volunteers, would be sufficient to defray the cost of a trip to the seaside, or some other little luxury, in which we could both participate, and which, if he were to serve on, we should be compelled to forego. As for patriotism, why should my husband be

expected to give both his time and his money for the public benefit, and thus oblige us both to practise a certain amount of self-denial, whilst our friends Mr. A and Mr. B, who are far better off pecuniarily, have never done a day's military duty, nor voluntarily subscribed a penny to the Volunteers?"

Arguments these, to which, under the circumstances, it was somewhat difficult to furnish an effective reply. The inference to be drawn, however, from all this, is, that if the pecuniary allowances in connection with the Auxiliary Forces were sufficient to cover all outgoing expenses, not only would the number of applicants for commissions be greater than at present, but the number of resignations would be considerably less.

The question of supplying officers for the Auxiliary Forces is beyond the scope of this Essay, and it is only necessary to debate the matter, in so far as it throws light on the probable difficulties, in the way of the recruitment of the reserve. The arguments which might be adduced by an anxious wife against service in the latter, might be even harder to combat than those quoted above, for reserve officers would, to some extent, be debarred from the pleasant social amenities, which, in some cases at any rate, are an undoubted attraction to the Auxiliary Forces, and, moreover, they might be called upon to abandon their civil pursuits at great pecuniary loss for a prolonged period, in order to perform military duty at some distant dépôt.

It is doubtless the case that officers of Auxiliary Forces are liable to be called out for military duty in the same manner as officers of the reserve. As a matter of fact, however, the Yeomanry and Volunteers have never for a century been mobilised as a body for permanent service, and the probability of such a call on their patriotism being made is not very great. The Reserve of Officers, on the contrary, has been required to perform a prolonged spell of military duty within very recent years, and it is not difficult to conceive that another such call might be made upon it in the future. The liability which attaches to a reserve officer, therefore, is obviously of a more serious character than that of his confrères of the Auxiliary Forces.

If, to fill the commissioned ranks of the latter, it would be necessary to grant sufficient allowances to cover all out-of-pocket expenses, the inference would appear to be that to draw sufficient candidates to the less attractive reserve, something more would be necessary, *viz.*, the prospect of direct pecuniary advantage.

It has already been suggested that the senior reserve officers, most of whom are professional soldiers, should be granted the pay and allowances of their rank, when called out for duty. In the case of the subalterns and junior captains of the reserve, and aspirants thereto, who would be practically civilians, a different system of remuneration might be more appropriate.

One of the greatest of disciplinarians, General Sir Charles Napier, has left on record his opinion that nothing so readily produces an undisciplined feeling of discontent as any uncertainty as to the exact amount of the remuneration to which each individual of an army is entitled.

In civil employment, to which reserve subalterns would be accustomed, each man usually receives a certain inclusive stipend. To prevent misunderstanding, with the resulting discontent, some similar system of payment might be advantageously followed with reservists, during their occasional tours of military duty, and their four months' preliminary training.

Instead of their salary being made up, as is the case with Regular officers, of various small sums respectively, representing pay, and allowances for light, coal, lodgings, messing, travelling, etc., it would be well if each reserve subaltern could be paid a consolidated salary, for every day or week of military duty. The amount of such salary should be such that on a reasonable computation, it would cover all expenses whatever, and in case of officers required for duty with the mounted branches of the army, it should be proportionately increased.

Arrangements might also be made to provide young officers on joining the reserve with their entire military outfit, free of cost, if they undertook to serve for a certain number of years, from the Army Clothing Department, and any changes of pattern from time to time officially ordered, should also be executed at the same establishment, at the public expense.

Lastly, an annual retaining fee should be given to every reservist not in receipt of retired pay. What the amount of such a fee should be is a matter of considerable importance, and is one concerning which any private individual can only speak with hesitancy.

The replies to enquiries, which I have ventured to address to civilians, whose opinions might be of value, lead to the belief that, in the case of gentlemen, who might elect to register their names for inclusion in the first category of the reserve, a fairly substantial honorarium, say £40 a year, might be necessary; for those who preferred the mitigated responsibility of the second category, a smaller annual retaining fee, say £20, would probably suffice.¹

It is submitted that the treatment to be meted out to reserve officers, from a financial point of view, should be such that young men and their parents, and guardians also, should feel confident that the acceptance of the responsibilities of a commission—and those responsibilities might, it should be remembered, eventually prove to be somewhat onerous—far from involving any outlay, would actually be the source of a slight immediate increase of income, the amount of such increase

¹ It is a matter for grave consideration whether such retaining fees ought not to be continued to officers, as some slight addition to a "living wage," when they are called out in emergency.

being augmentable, at the option of each individual officer, by the assumption of greater liability to active service on registration for the first category. For reasons which have been already stated, it would probably be unnecessary, generally speaking, to detain officers after they had completed about 15 years in the reserve. On relegation to private life, however, those individuals, who had rendered good service, and who had been included in the first category, for any considerable period might be granted a gratuity of £100. Such a concession would tend to induce men to stay on with the reserve, as long as their services were required. Similar advantages to those indicated above should be held out to young men residing in India, as an inducement to join the Indian Army Reserve.

As fully explained in Part I., any uncertainty as to conditions of service is apt to lead to misunderstandings, fruitful in discontent and inimical to zeal and efficiency. The regulations governing the rates of remuneration, and all pecuniary and other advantages of reserve officers, should, therefore, be embodied in a single publication, in the simplest possible form, so that no reasonable justification for any misconception could exist.

FEAR THAT THE CALLS OF MILITARY DUTY MIGHT INTERFERE WITH VOCATIONS IN CIVIL LIFE.

Parents and guardians, who are in no way inimical to the army as a profession, and who would gladly assist any young man they were interested in, to gain a commission in the Regular Army, are often disposed to look askance at the Auxiliary Forces. Such persons are apt to express the opinion that if a youth has military tastes, he should by all means be encouraged to become a soldier by profession; but they steadfastly set their faces against, what they very erroneously term, "playing at soldiers," in other words, against service in the Militia, Yeomanry, or Volunteers.

The Reserve of Officers would certainly fall under the ban of any person imbued with sentiments of this kind, and to trace, as far as possible, the origin of such ideas, and to investigate the means by which they might be combated, is within the scope, therefore, of this Essay. A firm belief is held in some quarters, and by men whose opinion is worthy of respect, that the glitter and display, which throw a glamour over military life, might tend with some young men to divert their attention from, and make them discontented with existence amidst more prosaic surroundings.

This belief has a certain amount of support in the unfortunate fact that a few—a very few—cases are, from time to time, to be met with, in which officers of Auxiliary Forces, forgetting that they are civilians first, and soldiers afterwards, have allowed their devotion to military work, to undermine, to some extent, their zeal for the calling or profession, by which they

earn their living, with the undoubtedly deplorable result, that their advancement in the latter has, to some extent, suffered.

Now, it is useless, by way of argument, to point to the infrequency of such cases, for the reply is immediately evoked that, granting that the danger is small, it still unquestionably exists; and as there is no necessity for a youth, destined for civil life in this country, to dabble with military matters, he had much better avoid so doing, and thus keep clear of all risk.

It is possible that, in many cases, where these arguments are put forward, the individual using them is rendered more obstinate by an unacknowledged fear, lurking in the background, that any connection with the Auxiliary Forces will mean heavy out-of-pocket expense.

A general conviction, however, that disturbing influences from an association with things military, are apt to react on civil pursuits, undoubtedly exists, and must, therefore, be taken into account.

In an article, published in the "Nineteenth Century" for November, 1906, entitled, "A Liberal's Plea for Compulsory Service," is given the results of exhaustive enquiries, made personally in Switzerland, by the author of the article, with special reference to the subject of military training.

The great preponderance of opinion in the Republic appears to hold that the moral effect of the short course of barrack and camp life, which is universally enforced, is, on the whole, excellent. "The great majority of parents have no anxieties about barrack life, beyond those inseparable from the age of the recruits (20), and their first entry into the world, whilst the discipline is universally recognised as an important factor in the national education. . . . Nearly all my informants," adds the writer of the article, "were parents whose sons were, or had been, in the army, and such regrets as I heard were from those who had had a son rejected. Several said outright, that quite apart from military reasons, they would gladly send their sons to the barracks, simply as a healthy introduction to the school of life."

From which it would seem that a limited experience of military life is not regarded, in Switzerland at any rate, as antagonistic to subsequent success in other callings.

It has already been explained that the system of instruction at the Swiss Federal Schools for military training, is conducted on somewhat severe lines, and it is permissible to suggest that military lore, imparted under such high pressure, may be by no means calculated to distract the youthful mind from civil pursuits, and that men, who have been disciplined in a sufficiently strict school, will be all the better citizens afterwards. No establishments could be devised which could afford better training in every respect for young men than is to be obtained in any unit of the Regular Army. As already explained, however, the interests of the service might suffer if regimental authorities, in addition to their other responsibilities,

were required to carry out the training of all reserve officers, under the high pressure conditions, which would be necessary to ensure the efficiency of the latter in the limited time that would be available.

The general public also are sometimes disposed to base their ideas of regimental life on the glimpses which they obtain at moments when officers are indulging in well-earned relaxation, and oblivious of the professional drudgery, which the latter must necessarily be obliged to perform, civilians in many cases, harbour a ridiculous belief that military life, in peace time at any rate, is so easy and so pleasant, that any young man, who has been permitted to share in its delights for any length of time, will be afterwards unfitted for settling down in any other profession. Nonsensical as this belief is, yet it is possible that if the regulations for reserve officers were framed with complete disregard for it, a certain number of parents and guardians might be rendered antagonistic to the reserve.

It would seem, therefore, that in the best interests, both of Regular units of the army, and of the reserve itself, the members of the latter should be trained in special schools; those reserve officers destined for regimental duty in emergency being required, after passing through a school, to spend a few weeks with the unit to which it was intended to attach them *à la suite*, with a view to their gaining some insight into regimental life and routine. If the schools for reserve officers in the United Kingdom were organised on a somewhat similar system to that which prevails in Switzerland, it is, perhaps, not too much to hope that a similar belief to that which prevails in Switzerland might also gradually impregnate the minds of British parents and guardians; and we might witness the destruction in this country of the absurd and mischievous doctrine, that simply because a man is sufficiently trained to arms to stand up in defence of his native land in the hour of danger, therefore, he has been rendered in any way unfitted for entire success in every-day life.

INDIFFERENCE TO MILITARY MATTERS.

There is a large body of men whose motto appears to be, "The cobbler should stick to his last." This attitude, on the question of national defence, can best be described by my quoting the remarks of a wealthy manufacturer from one of the Midland centres of industry, whose acquaintance I recently made. This gentleman incidentally referred, in a disparaging manner, to a near relation of his own, who was a distinguished member of the Volunteer Army.

I ventured to expostulate with him, and pointed out that the Volunteers were rendering good service to their country. To this my friend replied, that he had a great belief in professional ability, but placed little or no reliance in amateurs. If the navy and army, who were professional fighters, could

not secure the safety of the British Empire, he was quite certain that the Militia and Volunteers would not save the situation. If the Regular Army were not large enough, its numbers should be increased, and the extra cost might easily be saved by the disbandment of the whole of the Auxiliaries!

To these theories the worthy man adhered, in the face of all argument, with unshakeable firmness, finally bringing the discussion to a close with the remark that for civilians to intrude themselves as amateurs into the military world, which they did if they became Volunteers, was just as likely to lead to disaster as if a professional soldier were to come into his factory and endeavour to work it according to military ideas.

Unfortunately, this gentleman, who, it is to be feared, is by no means alone in his ideas, sprung from an intelligent class, from which admirable recruits for the Reserve of Officers might be drawn, if not debarred therefrom by narrow-minded prejudice, and by an incapacity for appreciating the needs of the Empire.

The only possible means of uprooting such theories would seem to be to attack them at the earliest stages of existence, and to endeavour to inculcate the principles of patriotism and devotion to the national ideal, in the minds of the pupils of all grammar and middle-class schools, on the lines which will be advocated anon in the case of Elementary Schools. To inaugurate such a reform in the national system of education, the hearty sympathy and support of the scholastic profession is essential, and as a first step in securing this, every effort should be made to develop Sir Ian Hamilton's suggestion, and school-masters of all grades should be encouraged by every possible means to accept commissions in the reserve, and thus to identify the teaching profession as a body with the principle that the first and most sacred duty of a citizen is to qualify himself to bear a share in the defence of the Empire.

THE DISLIKE TO ANYTHING CONNECTED WITH THE ARMY.

I now approach the last and most deplorable of the influences, antagonistic to military service, which exist in this country.

The theories and opinions tending in the same direction, which have been sketched in the preceding pages, although to be regretted, can, generally speaking, be supported by arguments which, although perhaps misguided, are at least not absolutely devoid of reason.

The school of thought, which declaims against all military training, on the ground that it fosters the brutal instincts of mankind, and which holds the theory that the safety of the Empire can be maintained by relying on the goodwill of our Continental rivals, would appear to be beyond the reach of any argument.

Fortunately, those imbued with peace-at-any-price theories are in a minority in this country, but this minority is active and persistent, and frequently makes its influence felt; moreover, the members of it usually belong to a certain social stratum, from which reserve officers are, to a large extent, obtained in foreign armies, and from which they also might be obtained in this country if existing prejudices could be stamped out.

Peace-at-any-price sentiments are, generally speaking, the heritage of a prosperous middle age, and do not, as a rule, find a place in youthful minds. The undermining of these, as of other prejudices opposed to the safety of the Empire, can best be attempted during the early stages of life; and if the principles of patriotism were a constituent part of the curriculum of every school in the kingdom, here, as elsewhere, anti-military prejudice would eventually be uprooted.

Elementary Schools, being supported by public money, should be required, as a condition of receiving such endowment, to devote a certain fixed time to instruction in the duties of citizenship. By enforcing such a system, we should but be following the example of the great nations of the world.

Nothing appears to have more impressed the members of the Moseley Commission, most of whom were teachers from Great Britain and Ireland, than the spectacle of thousands of American children saluting the national flag at the regular school assembly.

In Japan the youthful mind is saturated in the hours of school with the cardinal virtues of loyalty to the Emperor, patriotism, and filial piety, and a like path must be trodden in this country, if those individualistic theories are to be swept away, which are antagonistic to national security.

RECAPITULATION.

We have seen that, in the view of the most eminent authorities, a dangerous deficiency at present exists in the number of trained officers available to meet the demands of any great emergency, by which the British Empire might be confronted; that officers are the one adjunct of an army which it is quite impossible to improvise; that the existing Reserve of Officers was entirely inadequate to meeting the strain of the war in South Africa, and when called out, developed defects, which are apparently inherent to its present organisation.

We have seen that, although certain palliatives for the existing deficiency have been proposed, yet the weight of expert opinion inclines to the belief that an entirely satisfactory solution of the difficulty could only be reached by inducing a sufficient number of educated young men, both to qualify themselves for the reserve, by passing rapidly through the army, and to keep up their knowledge of military science after their restoration to civil life, by periodic returns to the colours; a system being inaugurated in this country, as similar as adherence to the voluntary system will permit, to those which prevail in

Germany, in Japan, in the so-called Regular Army of Switzerland, and, in fact, in most civilised countries. We have seen that, although no better leaders of men than our present officers could be found, yet it is scarcely possible to hope that a reserve mustering thousands could be recruited from the same class; that distinguished generals, having exceptional opportunities for forming an opinion on this subject, have suggested that it would be desirable to tap fresh sources of supply, gentlemen being attracted therefrom by the knowledge that if they are sufficiently patriotic to sacrifice their leisure for the public good, they will not be required, in addition, to suffer financially, their zeal being accorded an adequate pecuniary recognition; and that such a widening of the area of recruitment might not improbably prevent the requirements of the Reserve of Officers from clashing injuriously with the supply of young men for the commissioned ranks of other parts of the land forces.

An endeavour has been made to formulate a scheme which may, as far as possible, be in consonance with the opinions weightily expressed before the South African War Commission and before the Norfolk Commission.

A rough sketch has been drawn of arrangements which might prove feasible for the recruitment, clothing, training, promotion, and remuneration of a reconstituted reserve; and proposals have been made, having for their object the mitigation of hardship on a call to arms. The special qualifications, which should be possessed by officers destined for duty with native troops in India, have not been lost sight of. It has been suggested that, in order that the requisite knowledge might be reaped in the limited time which would be available, reserve officers should be required to work under very high pressure when called out for military duty; that, as it would be rather difficult to give instruction under such a system with units at home, special training schools should be established for the benefit of reservists, the latter, as explained above, being suitably remunerated in recognition of their strenuous exertions, and that only Indian Reserve Officers should be trained regimentally. The officially recognised maxim, that good service in School and University Volunteer Corps, should be acknowledged by partial mitigation of the period of qualification for a Reserve Commission, has been incorporated in the proposed scheme of instruction, and details have, as far as appeared practicable, been filled in.

The difficulties which were encountered, when the existing reserve was called out in 1899-1902, have been kept steadily in view, and the causes of the friction which was created, when the reserve officers in Russia were summoned to arms during the war with Japan, have been taken into account.

Lastly, the influences which might be prejudicial to the recruitment of the reserve, have been reviewed by the light of experience, gained both from the Auxiliary Forces and in every-day life, and proposals for their removal or abatement have, with very considerable diffidence, been adumbrated.

CONCLUSION.

Napoleon has left on record his conviction that, without a supply of trained officers, it is impossible to form an army, and, further, that capable officers can only be obtained by careful education.

The overwhelming weight of opinion of those qualified to speak with authority, supports the Emperor's dictum.

The training and maintenance of a Corps of Officers, thoroughly educated and sufficiently numerous, lies, therefore, at the root of military efficiency, and is essential to the security of any State.

In the case of a mighty empire, the majority of the citizens of which disdain the aid of compulsory service for the recruitment of the military forces, the cost of the latter must necessarily be considerable, and as the provision of a supply of reserve officers can be but a comparatively insignificant addition to what must, under any circumstances, be a heavy pecuniary burden, it would seem unnecessary to dilate on the question of expense.

No attempt has, therefore, been made in the foregoing pages to estimate the pecuniary outlay which might be necessary to carry out the suggestions which have been put forward.

The creation and maintenance of a reserve of 10,000 thoroughly efficient officers must, in any country, be a Herculean task; but the scrupulous respect, which is always shown in the United Kingdom, to individual liberty, increases immeasurably the difficulties of the operation. It would seem, therefore, possible that no system of reasonable pecuniary inducement would alone suffice to entirely conquer these difficulties, and unaided, call into existence such an organisation in connection with the British Army; and, hence, that a Reserve of Officers, like many other requisites to the national security, could only be built up by resting the foundations of our defensive system on the bedrock of national life; in other words, by training the minds of the young in the duties of citizenship.

It is urged in some quarters that British parents would not tolerate the inoculation of their offspring with the spirit of militarism; but surely this taboo, if it indeed exists, does not embrace also the spirit of patriotism?

Gibbon has eloquently told that the Roman Empire reached its highest pitch of splendour because "the fidelity of the citizens to each other and to the State was confirmed by the habits of education and the prejudices of religion. Honour as well as virtue was the principle of the Republic"; and that, as this lofty ideal was gradually abandoned, so did material prosperity forsake an empire, which, 2,000 years ago, was second only in importance to the vast congeries of States, which to-day recognise the supremacy of Great Britain.

The moral of the "Decline and Fall of the Roman Empire" should be impressed on the mind of every child, and should be

illustrated by object lessons, drawn both from the histories of the decaying nationalities of to-day, and from the magnificent advance of Japan.

The rising generation should thus be taught to realise the great fact that the birthright of every citizen of the British Empire, and the independence and wealth inherited from our forefathers, can only be maintained if each individual is prepared to sacrifice a small portion at least of his or her ease and convenience for the general weal.

An eminent educationalist, Mr. Ernest Gray, ex-President of the National Union of Teachers, when recently speaking with reference to "Teaching Imperially," is reported to have drawn a gloomy picture of the parochialism of the elementary school-masters in London, "many of whom," he declared, "have never been outside the parishes in which they were born."

If gentlemen engaged in the teaching profession were encouraged to accept commissions in the reserve, it is probable that much of this parochialism would disappear; whilst the importation of a new interest into the lives of a particularly hard-working class of men, would tend to distract their thoughts from professional cares, during their well-earned hours of leisure, and would thus make them all the better able to perform their duties as educationalists.

If it were also decreed that no school, of whatever grade or denomination, would receive the slightest assistance, direct or indirect, from the State, unless instruction in the principles of patriotism was installed as a regular subject in the school curriculum, it is submitted that the difficulties to which Lord Roberts and other eminent men have testified, would melt away, "like snow before a summer sun," and less than a decade would suffice for the creation of a Reserve of 10,000 Officers, endowed with a zeal and efficiency beyond reproach.

STAFF TOURS.

*By Brigadier-General H. H. WILSON, D.S.O., p.s.c., to
Commandant of the Staff College.*

On Wednesday, 26th February, 1908.

Lieut.-General Sir H. L. SMITH-DORRIEN, K.C.B., D.S.O., Commanding-in-Chief, Aldershot Command, in the Chair.

THERE are so many ways of treating the question of Staff Tours, that I found considerable difficulty in coming to a decision as to how to approach the subject for the purposes of this paper. In the end I thought there had been less written and said about these Exercises from the point of view of the Directing Staff than from any other, and, therefore, I have devoted the greater part of my remarks to that aspect of the problem.

Before going into any question of detail as to the conduct of Staff Tours, it will be well to consider what objects these Exercises serve.

Apart from those Staff Tours, held under Appendix VIII. A, of the King's Regulations, for the purpose of testing the fitness of officers for promotion, there are, I think, three different sorts of Staff Tours.

1. Those which are (or might be) held by and for very senior officers. They should deal with great issues and with large forces.
2. Those which are carried out principally by and for Senior Commanders and Staff Officers. They should deal, in the main, with Staff work.
3. Those which are carried out by and for Regimental officers. They should deal with problems suitable to the rank and sphere of activity of the officers engaged.

The third in this category, namely, Staff Tours for Regimental officers, has been so admirably dealt with by many officers, and notably by Colonel Haking, in a lecture given at the Chief of the General Staff's Conference, at the Staff College, in January, 1905, that I don't intend to make any further reference to this class of Exercise. As regards (1) and (2), that is to say, Staff Tours for very senior officers, and Staff Tours for Staff officers, I would like to make a few remarks before going into further detail about such Exercises, from the Directing Staff's point of view.

I will first deal with (1), that is, Staff Tours for very senior officers.

I am perhaps trespassing on dangerous ground and pushing into a country sacred to senior officers if I touch on the problems which such a Staff Tour might be expected to treat of; but to those who hope to live long enough to become very senior officers, a little curiosity may be pardoned.

Now, a problem set for very senior officers (and by very senior officers I mean men in the position of General Officers Commanding-in-Chief) should deal with great issues and large forces. Such problems necessarily include the consideration of Policy (not politics) and of Strategy. They, therefore, necessitate the close study of Military History and Modern History, a subject on which Lord Esher gave an admirable lecture at Aldershot last year, and the Policy, not only of our own country, but of any country which might become either an enemy or an ally. They would also include the study of Amphibious Strategy; the Armies of Foreign States, their Commanders and methods of fighting; Peace Strategy and War Strategy; Peace and War Organisations; the likely causes of friction; the enthusiasm (or reverse) roused by the cause of war; the state of preparation of our forces and of those of the enemy, and of our allies, if we have any; the defence of these shores; the military value (as compared with our enemies) of our Regular and our Territorial Army as regards the Generals, the Staffs, the Regimental officers, the rank and file; making good the wastage of war in each and all of these ranks and in both of these armies; the effect on our trade; riots and disturbances at home; difficulties in Ireland; how the war would affect our Colonies and Dependencies; the protection of Coaling Stations; the garrisons in the Mediterranean; Egypt; and the East and West.

Then the arrangements for mobilisation; grouping of Divisions into Armies; their transport to the Theatre of War by land and sea; the strategical deployment of the Armies, and possibly their co-operation with Allies when the question of divided command will have to be considered; these and a host of other questions would have to be considered before a solution to the problem could be offered.

Obviously, a scheme which embraces these points is one which can only be set by the Chief of the General Staff and carried out by those General Officers who command and administer large forces in peace, and who would be called upon to do likewise in war.

It must be entirely a paper scheme, and probably confidential.

It would require deep reading and deep thought both on the part of those who set it, and on the part of those who carried it out; but it would be a valuable exercise for those who had the good fortune to take part in it, and might form the basis of many subsidiary schemes which would come under (2).

As I said before, Policy and Strategy form the basis of such a scheme, its complete answer would call forth papers written on the model of Von Moltke's "Projects for the Campaign," of 1866 and 1870, two of the most interesting and instructing papers ever written on higher Policy and Strategy; and so, as they would comprise the higher arts of Statesmanship and Generalship, perhaps I had better leave them and pass to the more prosaic, though possibly in their degree equally important, problems which are usually dealt with on a Staff Tour, such as I have described under heading (2), namely a Staff Tour for Senior Commanders and Staff Officers.

I propose, then, to devote the greater part of this paper to points connected with a Staff Tour suitable for officers between the rank of (say) Major-General and Major, and to deal with the subject, chiefly from the point of view of those who have to set the scheme and correct the work.

Let us suppose, then, that it has been determined to hold such a Tour.

The first point to be considered is the number, rank, and experience of the officers available for the Directing Staff. In this connection it is well to bear in mind that those officers of the Directing Staff who set the Scheme and criticise the work, should be senior to all the officers who attend the Tour as combatants. In our Service (I don't think this obtains so much in the Navy) officers don't like being criticised by their inferiors in rank, be the criticism ever so just, ever so happy, ever so well put, and even ever so laudatory, although I have known this last class of criticism pass without serious adverse comment! Moreover, the office of critic is an invidious one for a junior when the criticisms apply to his senior.

The Directing Staff, or those who criticise, should be senior. If this Staff comprises officers of all four arms, so much the better, and the inclusion of officers of the Army Service Corps and Royal Army Medical Corps to assist in matters affecting their services in war will be found of real advantage. There is, however, room for a certain number of junior officers on the Directing Staff as Collaborators, Diary Officers, and so forth.

It must also be remembered that we find it impossible in the time usually available at Staff Tours for one officer of the Directing Staff to correct the work of more than five or six officers; whether such work comes in the shape of Orders, Reconnaissance Reports, Railway Schemes, Schemes on Lines of Communication, or what not. And it is of the essence of a successful Staff Tour that when work is handed in it should be promptly dealt with, and given back to the officers as soon as possible.

The number of the Directing Staff having been ascertained, the number of officers who are to attend the Tour can be determined.

The next point for consideration is whether the Scheme should be drawn up for opposing sides, or whether all the

officers attending the Tour should be on one side, the enemy being "Bogey" and run by the Directors. Both methods have their advantages and disadvantages.

When a scheme embracing two sets of officers on opposing sides is drawn up, we find:—

1. Greatly increased keenness in the work.
2. Two Commanders-in-Chief and superior Staffs.
3. At least two Lines of Communication and Bases.
4. More suitable numbers for hotels, etc.

On the other hand, we must be prepared for the following disadvantages:—

1. As only half the officers are on each side, smaller forces must be employed, as compared to a one-sided Staff Tour.
2. The Director cannot supervise the work of both sides.
3. The drawing up of the narratives becomes a matter of increased difficulty. (I refer to this later on.)
4. It is much more difficult to set a Scheme calculated to run through the Tour without some alteration, a thing which is always to be deprecated.

If, however, all the officers are on one side, "Bogey" being played by the Directing Staff, we get the reverse of the picture, both as to the advantages and the disadvantages.

On the whole, however, we find we get the best results, in the class of Staff Tours we are considering, when officers are placed in command of opposing sides.

We have now got this far in the projected Tour, that the Directing Staff is selected, the number of officers attending has been ascertained, and a Tour of two sides of combatants has been determined on.

The next matter for consideration is how to set the Scheme.

Now, before a Director sets his Scheme he should be quite clear in his mind what the object and purpose of the exercise is to be, and what particular lesson, or lessons, it is designed to bring out.

For example: Is the question of the Command of the Sea to be considered, or is the sea to be swept of hostile squadrons and an unopposed landing to be allowed? Is a base to be formed and a L. of C. to be built up? Are the operations to be carried out in enclosed or open country? Is the passage of a river or range of mountains to be dealt with? Is the coming war to be against a European Power or against savages? Are railways and telegraphs to be included in the Scheme, or are troops to be deprived of railways and only allowed such communications, signalling, telephone, and wireless, as form part of the equipment of an Expeditionary force? Are the opposing sides to be of equal military value, or is one side to be formed of seasoned and disciplined troops and the other of raw levies,

partially-trained officers and indifferent Staffs? These and many other possibilities will crowd into the mind of any Director who has the good (or ill) fortune to draw up a scheme for a Staff Tour. But if he wants the Tour to be a success, and if he wants to get full value from the work, he will draw up the Scheme with the set purpose of dealing with certain definite problems, and I feel sure he will not be disappointed with the results.

The particular object of the Tour being definitely fixed, the Director will turn to History to see if he can make use of an incident, preferably in the campaign of one of the Great Masters, which he can adapt to his own purpose in the forthcoming exercise.

Von der Goltz says, "Useful lessons are to be found chiefly in the fresh confirmation of old precepts and principles."

I would like, however, to sound a note of warning about historical examples. Don't push the example too far.

Modern arms, modern means of transport, modern communications, modern requirements, profoundly affect the application of old examples to modern times.

I think, perhaps, I will best convey my meaning and warning if I give a brief description of a Staff Tour I saw recently.

The problem selected was the old one of the effect on Strategy and Tactics of an obstacle running parallel to the general line of advance. In this case the obstacle was a river. The question for solution was whether the advancing army should move up the right bank, the left bank, or astride of the river. The matter was further complicated by a fortress astride the river about half-way between the frontier and the goal of the invaders.¹ Another frontier lay on one flank of the advance: it was parallel to the river and some 25 miles distant. In order to enforce the lesson, the Director drew up a *précis* of several campaigns containing the same problem, which were fought by famous generals in former times.

But modern fortifications, arms, and armament had completely altered the problem and the strategy appropriate to its solution, and the gap between the fortress and the frontier through which an army could penetrate in old times, was now under modern conditions rendered so narrow and dangerous that a movement which was formerly both advantageous and practicable, was no longer possible. The main advantage then, of a historical example and parallel, when setting a scheme, lies in the fact that the officers attending the Tour will find it necessary, or expedient, to study the history of former campaigns where a like operation was carried out.

¹This campaign, like all campaigns, was peculiar. The invading army aimed a blow at the enemy's capital in the hopes that the hostile forces, which were much scattered, would assemble and give battle to protect their capital, which was not only the seat of Government, but also their base, and contained their only arsenal.

So much for historical examples. They serve a most useful purpose when not pushed too far, and they add considerably to the interest of the daily conferences held during the operations.

I come now to the Scheme itself. The usual division of the Scheme into General and Special Ideas is sound.

The "General Idea" should put both combatants in possession of all the information they would have were they actually in the field, including information gained by the Intelligence Department previous to the outbreak of hostilities, and it must put neither combatant in possession of any secret information which would on service be the exclusive property of the other. To fulfil these two conditions and to condense all the information required for both sides, in a sheet or sheet and a half of foolscap, requires considerable practice and a certain amount of imagination.

A class of General Ideas which one sometimes sees, and which runs something like this:—

"A Northern Army is advancing South, and a Southern Army is advancing North"— scarcely fulfils the definition I have given above as to what a General Idea should contain.

I believe there are some people who think they can draw up Schemes for Staff Tours as easily as they can shell peas. Our experience at the Staff College is quite different. We find that, to get full value out of a Scheme and the work it produces, much time and thought must be given to drafting both the General and Special Ideas.

If there is anything in what I have just said about the necessity of enforcing a lesson and pointing a moral, it will be found useful to inform the officers of the Director's intentions some time before the Tour takes place. A short *précis* of former campaigns exemplifying the points at issue, or a short list of the campaigns and works which should be studied, will also be of great value, and if a Conference of all the officers can be held before the Tour commences, at which the Director can inform them of the scope and objects of the Tour, a further gain will have been made both in the interest taken in the coming campaign and in the value and quality of the coming work.

It always seems a pity, when so much trouble is taken, so much keenness exhibited by all who take part in one of these Exercises, that the utmost amount of instruction is not derived; the last ounce of knowledge gained, from the teachings of history, as applied to the work carried out. And remember that there is just as much to be learnt, perhaps even more, from bad work as from good. It is often the Director's red-ink remarks in the margin, remarks which should always be temperate and helpful rather than hostile and critical, which remain in the mind long after much of the work, which was so good that it required no marginal notes, has been completely forgotten.

I spoke of a certain amount of imagination being required. There is some danger, to judge of Schemes I have seen, that imagination may run riot. I remember an elaborate scheme in which most of the United Kingdom was submerged. Such portions as were allowed to remain above water were supposed to represent three Island States. The inhabitants of each Island lived in deadly enmity with its neighbours. Each State had a "fleet in being," considerable mercantile marine and large armies. There were other Islands, and a few Continents thrown in, and the net result was a pretty piece of imaginative work but a very poor scheme.

Yet much of the success of the Tour depends on the General Idea. It puts, or ought to put, the officers not only in possession of all the information they require, that is of all the information they would be possessed of in the ordinary way on Service, but it also puts, or ought to put, the officers in the frame of mind and with the trend of thought which the Director desires, so that when each side passes on to the consideration of its own Special Idea, it realises that the work asked of it, and the duties imposed on it, are in natural sequence to their previous knowledge of the general state of affairs in the theatre of operations.

And amongst the points to be noted in the General Idea, though sometimes left out, are: the moral of the troops due to previous successes or reverses in this or recent campaigns; the bases and, possibly, even some of the advanced depôts, this information gives the direction of the Lines of Communication which may profoundly affect the strategy of the campaign; the causes of the war, and whether the war is popular or the reverse in the countries concerned; the attitude of the inhabitants in the theatre of operations; the treaties of alliance, if any exist, and their probable effect on the conduct of the operations; and then, of course, the armaments, equipment, discipline, and military value of the troops engaged, the communications, both in transport and intelligence, and so forth.

I regret to say that the consideration of one of the most important factors for success in war has to be omitted. I refer to the characteristics of the opposing Generals. He would be a brave, or a foolish Director, who attached to the General Idea the Confidential Reports of the officers attending the Tour!

The topographical features of the country, the amount of supplies obtainable locally, the weather, and the time of the year, are usually, and I think rightly, taken to be those existing at the moment in the area covered by the exercise.

So much, then, for the General Idea. Our next concern is the Special Idea for each side. As already pointed out, the Special Ideas should convey Orders or Instructions which form a natural sequence to the General Idea. It is by means of the Special Idea that the Director gets his chance of putting the officers on to the particular problems and class of work in which he wishes to exercise them. It is here that he tells them

of the necessity for accumulating stores at the base or advanced depôts, of the dangers to Lines of Communication, of the administration of Commands, of Supply and Transport, Medical and Remount Services, of Ammunition Columns, of Ordnance Depôts, and also, of course, of the Grand Tactics and Minor Tactics which he desires to see attempted.

He should so word his Special Ideas that the officers will, during the four or five days of the Tour, almost unknown to themselves, and yet in the most natural manner work out the appointed lessons.

If the General Idea conveys all the information which it should, and if the Special Idea elaborates the points and indicates the direction in which the work is to be carried out, it will be found that nothing further will be required in this matter during the Tour. That is to say, it will not be necessary when half-way through the scheme to bring a fleet "into being" or swamp a fleet that is "in being." It will not be necessary to produce a phantom Brigade on the right flank, or to conjure up ten Army Corps like mushrooms, on the left flank. Earthquakes, and solar eclipses, gales and calms, floods and frosts, friendly natives and intercepted and breathless despatch riders, all will be unnecessary. Our friend, with the brilliant imagination, will have no chance of exercising his talents.

In nine cases out of ten, when the aid of the Gods is suddenly invoked during a Tour, it means that the General and Special Ideas have not been well and truly laid. If a day has to be added or a day has to be subtracted, it means that the Tour is not working out as its authors originally thought it would.

It is, therefore, a wise and indeed a necessary precaution for the man who sets the Scheme to pass it to a couple of his friends, and ask them to write an Appreciation on it, and to work it out day by day on the map. Without this preliminary exercise it is most difficult to insure that no hitch will occur, and no one is quicker to see that something has gone amiss than the officers who are taking part in the Tour. They soon lose confidence in the Directing Staff, and with loss of confidence goes loss of interest, and a Tour which promised so well on the Monday dies away to listlessness on Wednesday, and to positive boredom on Thursday. Such a dreadful contingency is not to be contemplated with equanimity, and especially when it can be avoided by a little preliminary trouble and care. The loss of money on a Tour that has miscarried is the smallest part of the misadventure, and the real loss lies in the fact that the Tour has answered neither the hopes of its framers nor the expectations of those who carried it out.

I have mentioned these awkward Wednesdays and chilling Thursdays in order to emphasise the necessity for great care in drawing up the Scheme.

One of the most difficult matters in Scheme setting is so to arrange and place the opposing forces that on the one hand they shall not come into close contact too soon, and, on the other hand, they shall not still be hopelessly apart at the end of the Tour.

It is to miscalculations in this matter that we so often find it necessary to alter dates during the Tour itself, to add or subtract days, to read the 28th February for the 26th, or to allow troops to perform prodigies of marching, or impossible movements by train within striking distance of the enemy.

And yet this correct placing of troops at the opening of the Tour is not an easy affair. I think I have noticed more than once that the initial fault in distribution is due to the desire, and the very natural desire, on the part of the Director, to give the officers an exercise which shall continue to embrace both Strategy and Tactics after the Tour has commenced. Now, so far as my experience goes, this is an impossible task.

What can be done, however, is this :—

A strategic appreciation can be called for on the General and Special Ideas, which shall deal with the larger factors and movements of the coming campaign, with the general tenor of events, with the allies and neutrals who have been brought into the Scheme, and with the central objectives and ultimate objects of the Government or Commander-in-Chief of each side.

Once this has been done, strategy passes away, to be replaced by Administrative exercises and Staff Duties, and on the last day or two by Tactics.

Of course, it is quite easy to set a Scheme in which Strategy shall take the prominent, and, except for Cavalry encounters, the only part. In order to do this the opposing Infantry Columns must be placed at considerable distance apart, say 80 or 100 miles, and the opposing Cavalry Divisions, Brigades, or Regiments at 40 or 60 miles apart. But then there will be no Infantry battles, and consequently, no Tactics other than Cavalry Tactics.

On the other hand, a Scheme can be drawn up with the opposing Infantry placed at such a distance apart—say, 30 to 50 miles—that a general action will be brought off on the 3rd or 4th day, but in this case, except by means of an appreciation written in the manner already described, there will be no exercises in Strategy.

It is, I think, when we try and combine an Exercise in Strategy and Tactics in a 4-day Staff Tour that our time and space calculations are at fault. In order to combine Strategy and Tactics in one Tour, the Exercise should last from six to eight days, and large forces should be employed, or much the same result can be obtained by the issue of a second Special Idea necessitating a second appreciation.

Whether at the opening of the Tour troops are fully or only partially mobilised; whether they are fully concentrated or much spread out; whether they are on the march or

at the halt; whether they are covered by Cavalry alone or by a Strategic Advanced Guard of all arms; whether they are lined up along a frontier; whether Advanced Depôts have been formed; or whether during the four days of the Tour they are to live on the country. These and many other matters of importance must be decided by the Director, who will no doubt so place the troops and so arrange the situation that he may best enforce the lesson or lessons for which the Tour is being held.

One other thing I would like to mention, which, although more a matter of detail, often affects the Tour in a vexatious manner on the last day, and that is the length of time it takes troops to deploy for battle. It must be remembered that one of our new Divisions takes up about 15 miles on a road. If, as often happens, where large forces are employed, two Divisions are marching on one road, it does not require much imagination to see that the time when the head of the leading Division strikes the enemy is not the same thing by perhaps one and a half days as the time when the two Divisions are deployed for action.

In settling where Divisions or large masses of troops are to be placed at the opening of the Tour, the Director will do well to remember this fact.

Before finally leaving the question of Scheme-setting, may I put in a plea for moderation in the size of opposing forces. I think it will be found that if only 30 or 40 officers are engaged in the Tour it will rarely be necessary to employ a larger force than three Infantry Divisions with a suitable amount of Cavalry on either side. When larger numbers are employed, work becomes too theoretical, and officers are placed in command of forces quite out of proportion to their rank.

I have now gone, I think, into sufficient detail as to the way in which Schemes can be drawn up, and for the moment the centre of interest passes from the Directing Staff to the officers attending the Tour; for the Scheme once set they take up the thread by writing their Appreciations.

I don't propose to explain how an Appreciation should be written. So many eloquent people have lectured, so many facile pens have written, so many official memoranda have been drafted on Appreciations, that it would be waste of time on my part to try and improve on what has been so ably said or written. One thing only will I urge, and that is, that the writer of an Appreciation, having steeped himself in the moral and physical atmosphere of the General and Special Ideas,¹ should first consider what he would do, and then consider the courses open to his friend the enemy. If he first considers the courses open to the enemy, I think you will find that his mind is thrown into a kind of defensive attitude, if I may so

¹ And this, of course, includes the knowledge, in so far as such knowledge is possible, of the position of the enemy's troops.

express myself, and you will see this attitude reflected in the proposals for his own actions when he comes to deal with them later on. There is, however, a point about the time for writing Appreciations which I think is worth our consideration. We find that the best value is obtained if the General and Special Ideas are sent out to officers a week or ten days before the Tour takes place in order that time may be given for the Appreciations to be thoroughly gone over by the Directing Staff and returned to the officers with such remarks as may be considered necessary when they assemble for the first Conference on the opening day of the Tour. It is not advisable to give officers their corrected Appreciations before the first evening of the Tour, because the Director's remarks may disclose too much of his mind at too early a period.

I pass to the next point of importance, namely, how and by whom the daily tasks should be set.

If the Tour is carried out as much as possible under Service conditions, the work for the coming day should be set and given out to the officers by the Commander-in-Chief of each force and (say) Divisional Commanders of each side. There is, however, a certain art in setting work if the best results are to be obtained. So, unless the officers who are appointed to the different commands are in the habit of giving out work of this description, it is a wise precaution for the tasks to be submitted to the Directing Staff before being issued. The work should be drawn up to fulfil four conditions:—

1. It should be calculated to enforce the lessons the Director desires to impress on the officers.
2. It should be suitable to the rank and position of the officer who undertakes it.
3. It should fit in with the Scheme, and be eminently practical.
4. It should be absolutely definite in its wording.

For example, it would not be wise or suitable to ask a Captain to reconnoitre a position with a view to its defence by six or eight Divisions; nor would it tend to keep interest alive in the Scheme to ask officers to do some work which they fully realise has no connection with the operations: let us say to set a railway entraining scheme if railways have been eliminated from the theatre of operations; and, finally, it is absolutely necessary, if you want good clear work done, to ask good clear questions. This is the most important matter to remember when giving out the daily tasks, and yet it is one which is frequently forgotten or ignored.

A type of work which I have often seen set is as follows:—

“Captain A will reconnoitre the position between the village of B on the right, and Church C on the left with a view to an attack being made on it.”

Such a task invariably brings in disappointing work, because Captain A does not know the strength of the enemy in

this position, whether the enemy's flanks are tactically secure, where the Lines of Communications are, nor has he been told the strength and composition of the force with which it is proposed to carry out the attack, nor whether it is part of another force on its right or left, nor whether the attack is to be what is termed a holding attack or an attack to be pushed in at all costs, nor how long his force will be given to carry out the attack, and so forth.

Work set in an indefinite style is answered by work carried out in an aimless manner, followed by copious red-ink criticism, followed by heart-burnings and dissatisfaction; and all the time the fault lies with the man who sets, and not with the man who carries out, the work.

And may I here make a few short remarks about the art of correcting or criticising the work of officers at Staff Tours?

It is true that Staff Tours are used as instruments of examination for promotion. This is a new, and, I believe, a very successful departure from old-established practice, and was brought in by Lord Roberts when Commander-in-Chief, and the criticisms on a Staff Tour for promotion are of quite a different nature from those on an Instructional Staff Tour. In the former they are notes of the Director who is trying to "size up" the officer's capacity and knowledge, and see whether he is fit for promotion. They are therefore critical and not helpful; but in the latter they are the remarks of a superior, both in rank and experience, on the work of a junior made for the purpose of helping the young officer along the road to a full knowledge of his profession. Such remarks, therefore, must be not critically (and I use the word here in its captious sense) but helpfully expressed. They should state not only that the work is good or bad, but why it is good or why bad. It is almost as disheartening when one's work is returned to find a simple laudatory remark such as "Good work" as to find a brief condemnation in the shape of "Poor" or "Indifferent" work. Either remark over, possibly, some illegible initials.

There is no educational value in either of these pronouncements. And yet it is possible to put a very high standard to the work sent in, and to comment freely on it, and not be critical in the hostile interpretation of the word. I grant that all this throws an immense amount of work on the officers of the Directing Staff, but that is what they are there for, and if they do work from 7 a.m. to 1 a.m. and get good results, it is labour well spent and well repaid. It is because of the heavy toll in work which is taken off the Directing Staff that earlier in my paper I advised that there should be one officer of the Directing Staff in a position to criticise to five or six officers attending.

It is infinitely better to have fewer officers out on a Tour and have the work thoroughly and exhaustively treated, than to have a greater number of officers and have the overlooking of the work scamped.

Following in the order of things, I come next to that most important question, the Narrative. The daily Narrative, it might perhaps more appropriately be called the daily "Intelligence Bulletin," is one of the most powerful of weapons in the hands of a skilful Director. By its agency he conveys to the combatants of each side the known movements of all the troops in the theatre of war, the general trend of events, the ebb and flow of battle. Not only is it the vehicle for giving all, or almost all, of the information to the officers, but it is also a valuable instrument for emphasising the effect of faulty strategy, or the disastrous consequences of bad tactics. It is in this document that a little military imagination is not only permissible but desirable, a happy phrase, a touch of local colour, wholly admirable. It is by the Narrative that the Director guides both sides, unknown to either, to the desired goal. It is on this paper that all daily orders are based. No wonder, then, that the Narrative is eagerly looked forward to by the officers of each side; no wonder that its drafting causes the Director many an anxious thought and many an hour's work.

I think it is only recently that most Directors have realised the immense power for good or evil which they possess in this daily bulletin, and the facility which this document gives them for guiding the Tour along the path they wish the officers to tread. In order to allow the Narratives of the opposing sides to be drawn up on a common base, and to a common end, it is necessary for the Directing Staff of each side to meet every day at some central place, and there discuss what may and what may not be put into the evening's Narrative. At such informal conferences the Director will decide as to the form of the Narrative, the amount of information to be given, and the manner in which it shall be conveyed, *i.e.*, as information from the Cavalry, from spies, from the Home Government, etc. Then he will also determine the amount of credit which good Generalship shall be awarded, or the degree of penalty attaching to faulty moves; and this can all be done without praise on the one hand, or blame on the other, but simply by placing the troops or limiting the Intelligence in such a way that the credit for good work, or the punishment for bad work, seems to follow the developments as a matter of course. Later on at the evening conference, or at the final summing up, the Director can show the officers of each side how their troops were penalised or assisted, and the reasons which guided him in forming his decisions.

The last point I wish to bring to your notice is the daily, or, shall I call it, nightly Conference. I think it will be admitted by all those who have taken part in many Conferences, that the essence of a successful meeting of this description is that it should be short, that the points brought forward should interest everyone and be of general application to all those present, and that the discussion should terminate with a brief summing up and a clear ruling by the Director, where a ruling is possible,

or with a lucid statement of *pros* and *cons* where a ruling is not possible.

If I am right in my description of an ideal Conference, then the best way to attain this end is for the Directing Staff to pick up the subjects of general interest when going over the work in the afternoons, and for the Director to bring them forward for discussion at the evening meeting. Nothing is so tiresome to all those not directly concerned as to hear some work which they have not seen, dealing with some problem of which they are ignorant, being discussed at length between the Director and one of the officers attending the Tour. We find at the Staff College that the best plan is for the Director to hold a general Conference of all the officers first, at which, as I have said, only subjects of general interest or points to which he particularly wishes to draw attention should be discussed. Then, after this General Conference, for each subordinate member of the Directing Staff to go through in detail, with the officers concerned, the work that he has looked over during the afternoon. Such procedure does not take long, and the officers are neither tired nor bored when the Director sums up the situation and gives his final rulings, or opinions, on the day's work. The final Conference at the close of the Staff Tour may, with advantage, be held, if the weather permits, on the ground at some central point which commands a good view. The Director's remarks will carry more weight and will have an added interest if he can point to the various features of the country which have had an effect on the Strategy and Tactics of the campaign. Such a commanding feature is not always at hand, but in the Salisbury or Marlborough country, on the Swindon Downs, or on the top of the Cotswolds, on a hill like Breedon Hill, near Tewkesbury in the Severn Valley, on the mountains of Wales or Scotland, and in many other places, ideal Conference hills can be found.

But if the weather is cold, wet, or windy, or if no suitable hill can be selected, I think it will be found that the Conference will be much more successful if held in a room. It is difficult enough at any time to conduct a successful Conference, and the difficulty is not diminished if officers have cold hands and feet, and drops on the ends of their noses, or if their hats and maps are blown away, or if an affectionate trickle of rain creeps down their reluctant backbones.

It would be easy to prolong this paper to an indefinite length by treating of such matters as Strategy, Grand Tactics, Minor Tactics, Counterstrokes, Orders; subjects of such importance and of such difficulty that they deserve, and, indeed, have received entire lectures to themselves. It would be easy to enlarge on such matters as the Reconnaissances of Positions, River and Road Reconnaissances, Embarkations and Disembarkations, Entrainings and Detrainings, Supply and Transport, Lines of Communication, Bases and Advanced Depôts, living on the country, the relations of the Brigadier-Generals in command of Divisional Artillery to the G.O.C. Division and

his Staff, Communications, Signalling, Telegraph, Telephone and Wireless, Sick and Wounded, and a hundred other points of great importance. It would not, indeed, be difficult to compile a paper treating of Staff Tours from a financial point of view. The obvious advantages and surprising comfort of 3rd Class over 1st Class in railway travelling; the unnecessary luxury of motor cars; the charm and economy of long bicycle rides in hilly countries in wet weather and on bad roads; the alluring prospects of "inclusive" terms at hotels, which so often "include" little but the "terms," and do not embrace the necessary early morning tea, the unnecessary bath, the luxury of afternoon tea, coffee after dinner, lights, fuel, or Conference rooms. Yet all these and many other matters have varying degrees of importance in all Staff Tours, and any Director who ignores them runs a considerable chance of his Tour being a failure be his Schemes, his criticisms, and his Narratives never so good.

In this paper, however, I have endeavoured to confine myself to the aspect of Staff Tours from the point of view of the men who set the Scheme, correct the work, and guide the Exercise in the required direction.

War is the only school in which soldiers can thoroughly master their profession, but it is difficult to persuade our civilian friends of this somewhat obvious fact; at least, it is difficult to persuade them to make wars in order that we should learn our business. Yet, when wars break out, we are supposed to be past masters in the profession of arms, that most difficult of all professions, since its single object is to kill our friend the enemy without being killed during the operation ourselves. Although it may appear to be a contradiction in terms, yet it is substantially true that every other profession is always at war even in the piping times of peace.

Is not the Churchman always at war with a gentleman, who shall be nameless, and even sometimes with other Churchmen, who might be named? Is not the Lawyer always at war in every Court of Justice in the world? Is not the Doctor fighting the fell Sergeant from early morn till dewy eve, and all the night as well? And even our brother sailors have to contend with fogs, gales, and lee shores. But soldiers have to pass through long periods of peace, during which it is most difficult for them to keep their mental equipment and their physical powers in a state of instant readiness for war.

Amongst the Exercises which we can carry out in peace, and which help to make us efficient in war, I claim a high place for Staff Tours.

My own opinion is, that a well-conducted Staff Tour is in many ways superior to manœuvres, as a means for training Staff officers in their duties.

In comparing Staff Tours with manœuvres, as a means of training for war, we must admit that the absence of men, horses and guns is a serious drawback to practical work; but,

on the other hand, in Staff Tours we deal with forces as laid down in War Establishments, our Regiments and Batteries, our Battalions and Departmental Services are, in our imagination, great living and moving units, and not the emasculated Cadres we so often see at manoeuvres. Woods hold no terrors; pheasants and hares give but an added pleasure; crops, root and cereal, have no cramping effects on our deployments and our movements. The magic and paralysing words "Out of Bounds" are unknown to us. What wonder, then, that our full-pictured war is more realistic than the outlined sketches which we see at manoeuvres.

Then, again, the Scheme at a Staff Tour is set with a definite object, and to bring out and teach a definite lesson (a thing rarely possible at manoeuvres, owing to the all-confining bounds imposed by peace, the farmers, crops, and water); the work is corrected and handed back to the officers, good and bad alike being exhaustively discussed; and finally the lessons learnt can be brought home at once and put before the audience in such an attractive manner, and with such directness and cogency that at the conclusion of the Exercise every officer who has taken part in it is distinctly and undeniably a better soldier than he was at the commencement of the Tour. Can as much be claimed for manoeuvres? And this increase in efficiency for war is the reason, the object, and the result of Staff Tours.

The CHAIRMAN (Lieut.-General Sir H. L. SMITH-DORRIEN, K.C.B., D.S.O., Commander-in-Chief, Aldershot Command):—As no one desires to discuss the excellent lecture we have just heard, I think I may say the silence with which my request for discussion was received is the greatest compliment the lecturer could possibly have had. It shows that he has dealt so exhaustively with the subject that no one has anything further to suggest or propose. I, too, am entirely in sympathy with the feelings of the audience in this respect, because I feel that, difficult as the subject was, it has been dealt with so thoroughly that it is very hard for me to suggest anything fresh. Therefore, any remarks I have to make are more remarks in agreement with the many excellent points the lecturer has brought out. With regard to the first class of staff ride he mentioned, Class A, I was very much struck with his suggestion in that respect. I had never heard of such a staff tour before, namely, one entirely for the education of the senior generals in the Army, and I must own that it struck me as a very sound suggestion. It is very hard, for instance, for a man in my position to get thoroughly acquainted with all the points of policy and organisation in connection with a war with a foreign country, and I think if the Chief of the Staff—and I quite agree he is the only person who could do it—would set schemes for general officers, and would aid them with the necessary *data* to be worked out by the officers of the General Staff at Army Headquarters, we should all be very much more fitted to carry on a campaign if we were ever asked to do so. With regard to Class C, which was the Staff Ride with which the lecturer principally dealt, I was impressed by his remarks with regard to the size of the staff ride being limited by the size of the Directing Staff, for it is perfectly true that if you want to get the very best instruction out of a staff ride, you must be able to criticise thoroughly

every individual officer's work on that staff ride. Also, I agree with him that a double staff ride is certainly much more interesting than a single staff ride, and I think that there is always a spirit of emulation between the opposing sides, and that they enter into it with more keenness than if they work as one force against an imaginary skeleton enemy. One thing I do think is absolutely necessary to ensure the best results coming from a staff ride, namely, that the brain which draws up the scheme should carry it out as director. In that way I think many of the pitfalls which the lecturer referred to would be avoided—I mean the improvising of imaginary fleets and sunken fleets, and railways which do not exist, and all that sort of thing. It is absolutely necessary that the director should have thought out every point of view himself, both from the enemy's point of view and his own, before he finally sets his scheme. I was also very much struck with the author's opinion, that any scheme before it is finally issued should be given to a friend to work out, in order to make quite sure that it was all right, because very often I know myself I have set schemes, looking at them from my own point of view, and have been apt to miss the point. I have handed the schemes over to my staff, and have said: "Now, go through the staff rides yourself on my scheme." Then, if the staff came back and said that it panned out all right, I was satisfied. Again, I think the same remark might apply to any order which a commander issues. Very often he may issue the order after having thought it out most carefully, and he may think he has allowed for any possible eventuality, and yet he may just miss something. Therefore, again, it is far better he should give his order, before issuing, to one of his staff or another general, and ask him to look through it and see if it conveys what it was intended to convey. Then with regard to the conference before a staff ride, I consider it an absolute essential. I consider that the conference and lecture on the staff ride by the director are of very great importance. Now with regard to what Colonel Wilson said on the subject of the time necessary for a staff ride which embraces both strategy and tactics, it is much more interesting, I think, if one can have a staff ride which embraces both; but I quite agree that to do it thoroughly requires at least seven or eight days. In this respect, perhaps I am what might be called a "whole-hogger," because I rather like staff tours of seven or eight days; but at the same time, I do not think they are to be advocated. It is all very well for the director, but the rank and file, so to speak, of the staff ride get horribly bored, and I think the utmost limit of time the staff ride should last is four, or possibly five, days. There is one point of interest for us to consider, and that is, whether staff rides should always take the form of working out European tactics. You must remember that the British Army is liable to be employed in any part of the world. One of the duties, as you know, of the Army in England is to reinforce the Army in India. There are constant exchanges of corps between the two places, and any corps in England at the present moment may find itself next year on the frontier of India. Unless it is very well versed in the tactics of savage warfare, I maintain it runs a risk of very heavy loss, and I therefore think it is of great value to bring into the tactical part of the staff ride every now and again some form of savage warfare. It should be all worked out by the director in the general scheme before he starts, and he should perhaps make it a condition of the campaign that it is taking place partly through a savage country in order to get at the European enemy. Whilst passing through this savage country he can make schemes for defensive camps for retirement before the enemy, such as has

taken place or will take place in a day or two up in the Zakka-Khel country. I think a staff ride in this respect is of very great value, and in our training for war it should not be lost sight of that we are likely to meet a savage enemy as well as a European enemy in the near future. I have been in India a great part of my life, and I think that the training in India has been very seriously taken of late years, and I have no hesitation in saying that since the Tirah campaign, battalions in India have learned thoroughly how to fight a savage enemy. Therefore it was very pleasing to see in General Willcock's telegram two days ago that he thought the campaign with the Zakka-Khel was proceeding so well and with so little loss owing to the efficiency of the training for war against a savage enemy of the troops in India. I have been talking rather big on the subject of staff rides, but my experience is really rather limited, for except a somewhat unambitious scheme worked out at the Staff College twenty years ago, I never saw a staff ride until four years ago, when I went to take the Quetta Division on the frontier of India, and found myself in the position of a director of a staff ride. I was rather vague as to what was the scope of a staff ride, and I was sceptical about its being a useful business. I set myself to work out a scheme, and I do not think it panned out badly on the whole. I believe it gave a very considerable amount of instruction. I will give you roughly the lines upon which it was run. I wanted to have as many officers out as I possibly could, and I worked a division of all arms on the Indian strength. We got news that an attack was expected some thirty or forty miles off, and the division moved out on a front of twenty miles to look for the enemy. At first there were the three brigades, one on each road, and all the divisional troops in touch by signallers, with a brigade of cavalry in front of us. We moved for the first two days in this order, and the only information that came back was information which I had drawn up myself to add interest to the operation. I had worked out what would happen every hour of the day, and what sort of information would come in, and the cavalry officers in command of the imaginary contact squadrons had been given envelopes which they were to open at certain hours. On each envelope was marked the hour and approximate locality at which it was to be opened. No one else in the force knew anything about this. At the right moment the cavalry officer opened the envelope and found certain information that the enemy was moving here or there, or smoke or dust had been seen, and so on. This was signalled in or sent by orderlies (for we had no field telegraph), and the brigadiers issued their orders on it. On the third day I had a skeleton brigade of cavalry out and twelve squadrons represented by twelve pairs of mounted men with flags, and these were sighted. We followed them up and came to a position where there was a skeleton infantry and guns in position. This was a signal for the brigades to close in and get into touch, and then we had to attack a position. They retired from this position, and next day we found the whole of the Quetta troops in the position, and I think it caused enormous interest. The only thing that might be said about it, perhaps, was that it was too long. On that occasion each brigadier ran a little staff ride of his own, and every night he had his conferences. When we came together on the third day we were able to have big conferences of the whole of the 100 officers we had out. One very instructive part of it—a part which I have carried out in every staff ride since—was that we had every signaller out, 150 signallers: each party of signallers for the whole force complete as if the actual corps had been present. Of course, India particularly lends

itself to this kind of operation, and it would be very difficult to carry it out in this country. I am sorry to say I had not the opportunity of reading Colonel Haking's lecture which Colonel Wilson referred to, but I shall hope to get hold of it and read it, because I am quite sure there is a very great deal to be done by very small staff rides, regimental tours, and so on. I think if young officers were only trained from the moment they joined to get into the way of thinking for themselves and working out appreciations of situations—no matter how small—it would be invaluable for their education, and very much can be done in that direction close at home. You can take a few officers for an hour just outside the barracks and give them some quite small and simple scheme, telling them that a squadron of cavalry is moving down *that* road, that two guns have been moved into position *here*, and a certain amount of infantry is *there*, and that such and such is the situation, and then let them write their appreciation. I cannot help thinking that if every opportunity was taken of practising that we should get our young officers very much better trained to think for themselves. I won't take up more of your time in describing further staff rides, but we had a large one each of the four years I was at Quetta, gradually reducing them to what the lecturer has described as most suitable, viz., "a large strategical problem to be worked out before the ride starts, followed by grand and minor tactical situations." These latter we actually worked out in the field, the whole ride lasting five or six days. Throughout these each divisional commander, brigadier, and unit commander was accompanied by an orderly with a distinguishing flag. We found these flags added enormously to the interest of any operation, especially on days when the problem had boiled down to a purely tactical one. The result of my four years' experience is that I am a firm believer in staff rides, I look upon them as a very valuable means of instructing the officers of the Army where we cannot have our troops actually in being, and I look forward very much to seeing a staff ride in England, which, as I said, I have not yet seen except at the Staff College many years ago. It now only remains for me to offer my thanks, and with them I think I may add the thanks of the meeting, to Colonel Wilson for the great trouble he has taken and for the very excellent and valuable lecture he has given on this most interesting and difficult subject.

STUDIES IN APPLIED TACTICS.

CAVALRY IN BATTLE (15TH AND 16TH AUGUST, 1870).

By P. LEHAUTCOURT.

Translated by permission from *Le Journal des Sciences Militaires*,

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Continued from April JOURNAL, p. 538.

V.

THE FIGHTING AGAINST THE 2ND AND 5TH CORPS.

THE disappearance of the artillery and dragoons of General Forton, allowed the German batteries to move forward. Three of them at once advanced to the hill 297-294 immediately to the west of Vionville, which our guns had just left, and from where there was a grand view in all directions. Forthwith they opened fire on the bivouacs of the 4th Division, accommodatingly spread out over the slopes falling towards Rezonville on the west. The 10th Hussars were sheltered in the valley of Flavigny; the remainder of Redern's Brigade (11th and 17th Hussars), who were massed at Tronville by Rheinbaben's order, reached also a position close up along the south edge of the Tronville copses. Bredow's Brigade made a slight demonstration between these copses and Vionville, while that of General Barby reached a post of observation to the west of the copses. The German batteries kept up their fire for some time on the infantry of the 2nd Corps, in spite of the fire of our artillery, which by degrees came up into position.

While the 5th Cavalry Division intervened thus with the fire of its batteries much more than with the sword or lance of its horsemen, the 6th Division remained at first in observation before Metz on the right bank of the Moselle. It was useless where it was. It would have been more natural for the division to have preceded the 3rd Corps on the left bank of the Moselle. But it did not do so. This Army Corps crossed the river on the night of the 15th-16th August. At 2 a.m. the Divisional General, Duke William of Mecklenbourg, received

from General Von Alvensleben the order to regulate his march so that he should pass the Moselle at Corny before 5.30 a.m.; his crossing finished he was to march in front of the 3rd Corps. But the suspension bridge of Novéant-Corny only allowed the cavalry to cross over dismounted and in single file, so that the 6th Division was not assembled on the left bank till 7 a.m. It did not begin its move on Gorze until 7.30 a.m., some time after the head of the Army Corps. Zieten's Hussars (3rd Regiment) were leading, then came the 16th Hussars and a horse battery, and last of all Grüter's Brigade. The infantry advance guard, which had held during the night this important defile, reported the presence of French cavalry outpost on the heights of Rezonville. Here some infantry was also supposed to be in the woods, which sloped towards Gorze; and the Staff Officer of the division, who had pushed on with a squadron to Rezonville, confirmed this information.

This decided the Duke to use prudence. Instead of getting to the issues from the wood as quickly as possible, as he should have done, he awaited the head of the 3rd Corps to the east of Gorze. It was only when this arrived that he advanced Rauch's Brigade along and to the west of the Bois des Prêtres at Flavigny. General Von Grüter's Brigade received the order to establish connection with Rheinbaben's Division via Buxières and Mars-la-Tour. As regards the battery, it first took up a concealed position to the north of Gorze (perhaps by the spur 283). It can be seen with what cautiousness our positions were taken up.

The result was that Rauch's Brigade was, at first, the only one to appear in front of our outposts. But soon after, at 9 a.m., came a new order: Alvensleben commanded him "to push forward the whole division on to the plateau." The battery joined Grüter's Brigade, which was inclining to the right through the Gaumont wood.

In debouching to the north of Gorze Rauch's squadrons came under a sharp fire from the Vionville wood. They sustained considerable losses. Rauch thinking that an isolated attack was impracticable against the masses of infantry, which appeared at Rezonville, went back down the slopes, and took cover.

As regards Grüter's Brigade, it had easily driven back the advanced troops of Valabregue's Division. To his right the battery opened fire a little to the east of the statue of Sainte Marie, directing its shells on to the bivouacs of the 2nd Corps, which it saw between the woods and Rezonville. It was about 9.15 a.m. Only pure chance had caused the demonstration of the two German Cavalry Divisions, which were quite independent of each other, to be simultaneous. The command, divided between Alvensleben and Voigts-Rhetz, had evidently nothing to do with it. It would have been preferable that the 5th and 6th Divisions should have been under the same command, at any rate during these critical days, as their task was the same.

As it was, their enveloping attack, undertaken on a very large front, although with very limited forces, obliged us from the beginning to take up divergent movements which proved a great handicap. Another circumstance contributed to this, and that was the crush of our troops round Rezonville. Following our custom at that time, we occupied ground restricted in proportion to the numbers of our troops. On the evening of 16th August the front of the Army of the Rhine, from Grizières farm to the Bois des Ognons, measured from 8 to 9 kilometres—a very short extension for five Army Corps.

After a moment of disorder the 2nd Corps was rapidly got together. Its batteries and part of the artillery of the 6th Corps opened fire on those of Rheinbaben and of the Duke of Mecklenbourg, which were soon in a very difficult situation. The three batteries of the 5th Cavalry Division which had been led forward by Major Korber to the hill 297-294, and were already engaged by three French divisions, had besides to endure the fire which the 12th Battalion of Chasseurs directed on them from the edge of the Vionville wood, which was very close (400 to 500 metres). Two of them found themselves forced to take shelter in the fold of the ground to the east of Tronville. The battery on the left (the 1st Horse Battery of the 4th Corps), partly covered by the poplar trees of the roads from Mars-la-Tour and from Tronville to Vionville, was the only one to stand up against this rain of projectiles, but was not able to check the advance from our right.

Bredow's Brigade was then obliged to quit the valley to the east of Tronville coves, and to go to their western boundary, where it rejoined General Von Barby's Brigade. The 10th Hussars also gave way under the fire of the French infantry who had just occupied Flavigny; and retired as far as the Saulcy farm. Then, Grüter's Brigade (6th Division) retreated also before Vergé's Division of the 2nd Corps, and reached the northern border of the Gaumont wood, where in a short time the divisional horse battery joined it about 10 a.m.

Up till then the material result of the double German attack had not been of much account. Although this surprise had thrown a portion of our troops into disorder the infantry had rapidly got together and the two Prussian divisions had had to retreat. But their offensive action, so timid, so inopportune in certain ways as it had been, had led us to deploy prematurely three infantry divisions, and the consequences of this false move told on us till the end of the day.

The two infantry divisions of the III. Corps were engaged, the one to the north of Gorze, the other at Vionville. All the Prussian artillery was in action against that of the 2nd and 6th Corps. The extension of front of Alvensleben's troops from the Roman Road to the Bois des Ognons was very considerable—6 kilometres as the crow flies. Their line was very thin, and there was no probability that it would be reinforced quickly. Our opponents knew well the danger of this situation. Rheinbaben, although normally attached to the X. Corps,

put his Division at the disposal of Alvensleben. The latter asked him to concentrate Barby's and Bredow's Brigades behind Buddenbrock's Infantry Division, between Vionville and Mars-la-Tour. The Duke of Mecklenbourg's Brigades were sent in the same way in rear of the right of Stülpnagel's Infantry Division. These two bodies of cavalry remained under cover, and ready to intervene at any moment. If ever there was a case when the intervention of cavalry was required on the field of battle it was then, when on the morning of the 16th of August an infantry line was ready to give way under the pressure of superior numbers. The presence alone of the cavalry behind the firing line reassured it.

It was not that Alvensleben had any illusions about the lack of offensive inclinations of the commanders of his fine squadrons. "I had the disposal of 18 cavalry regiments, as General Von Rheinbaben had put his division under my orders. That fact gave me a great liberty of action. Only one difficulty presented itself to me. Certain impressions which I had received at Spicheren, on the spirit of cavalry self-sacrifice, that is to say, on the disposition of the chief commander to risk his troops, as is done with the other arms, haunted me since that battle, and weighed on my mind during the whole war."¹

The situation of the III. Corps was growing worse in spite of the arrival of some portions of the X. Corps who had marched to the sound of the guns. Besides the three battalions belonging to this Army Corps, there was nothing but the cavalry in reserve. The cavalry, belonging to the infantry division of the III. Corps, had mostly concentrated on either wing of its horse batteries. The 12th Dragoons remained on the south boundary of the wood of St. Arnould; the 2nd Dragoons to the west of the hill of Sainte Marie, its first squadron at the Vionville cemetery; two others (the second of the 2nd Dragoons of the Guards and the first of the 17th Hussars) were in the neighbourhood. The 9th Dragoons was split up between the 2nd and 12th Dragoons. More to the west in the ravine which separates the cemetery from the hill of Sainte Marie, were the 17 squadrons of the Duke of Mecklenbourg. Redern's Brigade secured both flanks of the left division of the III. Corps (Buddenbrock); the 11th and 17th Hussars were posted between the Mars-la-Tour Road and the Flavigny ravine for the purpose of establishing connection between Stülpnagel and Buddenbrock; and the 10th Hussars were to the south of the Tronville copse. Barby's and Bredow's Brigades were at Tronville, leaving only the 13th Dragoons to the west of the copses in order to watch the masses of the 3rd and 4th Corps, which began to appear at Bruville and St. Marcel.

Meanwhile the 6th Corps had engaged some of its units on the right of the 2nd Corps. To the north of the Verdun Road the 91st Regiment attacked Vionville frontally, but it was

¹ Allusion to the indecision of the German Cavalry on the evening of the battle of Spicheren.

obliged to retreat because of the appearance on its right flank of fresh troops of Prussian infantry. We began on this flank a retrograde movement which soon extended to the whole regiment. It retreated to the north-east fighting as it went.

At the beginning of this retreat the Chief Staff Officer of the III. Corps, Colonel Von Voigts-Rhetz, thought that the moment had come to launch the cavalry in pursuit. He sent against the 91st Regiment two squadrons (the second of the 2nd Dragoons of the Guard and the first of the 17th Hussars) who had arrived from the left of the batteries at the cemetery. But our infantry was not sufficiently disorganised for this charge to be successful. On the contrary, it failed from the very beginning with heavy loss, viz., 70 horses out of the squadron of the 2nd Dragoons of the Guard. This charge made such a little impression on our troops that it is not mentioned in any of the records of the 91st or 94th Regiments, published by the *Revue d'Histoire*.

It is possible also that the check of the two Prussian squadrons may have been due either to the configuration of the ground or to its faulty employment. If, as seems probable, the charge, starting from the interval between Vionville and the cemetery, went round to Vionville to the east, and then over the slopes south-west of the hill to the south of the Pierrot wood; it was in full view the whole way, and so could not have produced any effect of surprise on the 91st Regiment.

VI.

THE CHARGE OF THE 3RD LANCERS.

At 12.30 p.m. our extreme right rested on the ravine to the north of the Tronville coves, and had not yet been engaged. Then our line followed the Roman Road and from there inclined to the south-east and joined the Mars-la-Tour road. After the retreat of the 75th and 91st Regiments of the line, the 93rd was the only one of the 6th Corps to continue the fight between the Roman Road and the main road. It was efficiently supported by 15 batteries posted in this region or just to the north of it. Along the road the 9th Regiment of the Line held that portion of the defensive line which was drawn back on the left.

Behind our right some important forces had already concentrated; Clerembault's cavalry, the Reserve Artillery of the 3rd Corps, and Aymard's Division on the outskirts of St. Marcel, to say nothing of four battalions of Tixier's Division still in reserve. Nayral's Division of the 3rd Corps debouched at the Caulre farm, coming from Metz. Finally, the first troops of the 4th Corps, two Horse Batteries, and a regiment of cavalry (11th Dragoons) appeared to the east of Bruville. The presence alone of these troops rendered extremely delicate the situation of the Prussian left to the north of the Mars-la-Tour road.

To the south our adversaries were in a much better position. The retreat of the 2nd Corps was nearly complete, in spite of the intervention of parts of the 6th Corps and the general artillery

reserve. Only five battalions supported by five batteries held the position from the road to the Gorze ravine. Four other battalions were in reserve about Rezonville.

To the north, the Prussian offensive was threatening. We had just lost Flavigny for the second time; the 94th, which had occupied this hamlet, was in full flight to the north-east. To the south, between the Chambley road and the Gorze ravine, the enemy's infantry, worn out by several hours of bloody effort just held their ground. Its artillery maintained its superiority over ours, although of inferior strength. Alone and unaided it prevented the Prussian infantry from giving way before us.

In fact, on the left, Lapasset's Brigade with five batteries held the interval between the two ravines of Gorze and St. Catherine, as well as the western part of the Bois des Ognons.

Besides the preceding forces there was round Rezonville a very large concentration of troops: 13 battalions and 12 regiments of cavalry, these latter represented by Forton's and Valabregue's Divisions, the 2nd Chasseurs, 3rd Lancers, the Cuirassiers and Carabiniers of the Guard. They were amply sufficient to guard against any eventuality. But owing to the stampede of the 94th, and the stout offensive of the two Prussian battalions commanded by Captain Hildebrand to the east of Flavigny, it was considered that the intervention of our cavalry would be expedient. There seems, however, that no positive order was given in this sense. Marshal Bazaine and General Frossard confined themselves, in accordance with their well-known habits, to giving vague orders, which were necessarily badly carried out. At least, that is the conclusion arrived at after consulting most documents. According to General Frossard, he asked the Marshal if he did not think that a cavalry charge would be useful to stop the advance of the enemy's infantry. The Marshal said: "Yes, I think you are right. What cavalry have you?" "The 3rd Lancers, but they are a little light," said I to the Marshal. Then I added, "We must do something. The Cuirassier Regiment of the Guard might support us." "Yes," said the Marshal, "give orders to General du Preuil to support you with a regiment of the Cavalry of the Guard."

The diary of the Guards does not perceptibly modify this account. "At 11.30 a.m., by the Marshal's order, the regiment of Cuirassiers was sent by General Desvaux to the south of the road to support the 3rd Lancers. At 12.15 p.m. General Frossard gave the order to General du Preuil for the 3rd Lancers to charge, and to be supported by the Cuirassiers. This order was approved by Marshal Bazaine. . . ." The records of Desvaux's Division read as follows: "At 11.30 a.m., and at the request of General Frossard, the regiment of Cuirassiers executed a charge." According to the report of General Bourbaki on the operations of Desvaux's Division: "The regiment of Cuirassiers was sent off at 11 a.m., under the orders of General du Preuil, to support the 3rd Lancers, and took

up a position 500 metres in rear. At 11.30 a.m. General Frossard sent the 3rd Lancers the order to charge, and the Cuirassiers the order to support the charge. He also ordered General du Preuil to put himself at the head of the two regiments. This order was approved by the Marshal, and the charge commenced. . . .

The report of General du Preuil is still more explicit: "At 11.30 a.m. the regiment of Cuirassiers was sent by the divisional general to the south of the road to support the 3rd Lancers. Directed by General du Preuil it took up its position 300 metres from this regiment in rear of Rezonville."

"At 12.15 p.m. our infantry, pushed back by the Prussian forces, gave way in disorder. General Frossard sent the 3rd Lancers the order to charge, and to General du Preuil the order to support the charge with his Cuirassiers."

"General du Preuil advanced to the firing line to receive the orders from General Frossard, who said to him: "General, take command of the Lancers and Cuirassiers; charge the batteries at full speed." Just as General du Preuil started, the Marshal arrived and said to him: "Du Preuil, charge. It is urgent and don't lose any time."

Finally the account of an eye-witness confirms the substance of these different documents: "The Cuirassiers were placed on the left on the same alignment as the Carabiniers. Hardly were they in position than General Frossard, whose Army Corps had been unable to withstand the enemy's attack, came up at the gallop and spoke to Colonel Dupressoir. "Colonel," said he, "charge with your regiment, or we are lost."

Almost at the same moment the Marshal arrived. He took stock of the situation and said, "We must sacrifice a regiment." And turning to the Colonel of the 3rd Lancers he said, "Colonel, charge. And you, Colonel Dupressoir, will support the charge if it is necessary."

The manuscript records of the 3rd Lancers also read: "The Marshal arrived here and himself gave the order to the 3rd Lancers to charge."

The historical records (printed 1889) of the Cuirassiers of the Guard give another version of this episode from the notes of General Davignon, who was in 1870 a lieutenant probationer on the regimental staff: "General Frossard himself would have ordered Colonel Dupressoir to charge, but the Commander of the Cuirassiers would have objected to have engaged his regiment without the assent of the Divisional General. Lieutenant Davignon was sent to General Desvaux, who, without answering, sent him on to Marshal Bazaine."

According to the records, the latter, giving voice to his thoughts, spoke as follows: "It is absolutely necessary to stop them: we must sacrifice a regiment." He sent at once an officer to take the 3rd Lancers the order to charge. Then, turning round to General Desvaux, he said: "The Cuirassiers of the Guard will support the charge of the 3rd Lancers." Lieutenant Davignon transmitted at once this order to Colonel Dupressoir.

Then Colonel Sainte-Chapelle writes, quoting from the report that was made immediately after the war by Lieutenant Saint James, Ordnance Officer to General du Preuil: "The place where Marshal Bazaine and his Staff were situated when du Preuil's brigade was halted to the north-east of Rezonville, has not been defined, so far as I know, any more than have those places where the successive conversations between Generals Frossard, Desvaux, du Preuil, etc The words quoted were indeed spoken, but at different times, and no decisive order was given. General Frossard was the only one to insist on the charge The Generals Desvaux and du Preuil thought the moment inopportunely chosen. These discussions had taken place in presence of the Marshal, who only answered evasively, according to his custom. General Frossard repeated himself several times. General du Preuil only wanted to go, but he first wished to concentrate his Brigade, and allow the Prussians to advance, in order to be able to attack them closer at hand, and to come on them unexpectedly when they would be fairly near. Annoyed at the bad timing of the charge, he had proceeded in front of Rezonville, when all at once he saw the 3rd Lancers begin their move. I doubt whether the regiment had been formally put under his command, for he did not appear to pay any attention to it otherwise than in saying: "Where are they? It is not the right time." At the same time he at once came back nearer to the plateau 307, where he had left the Cuirassiers, and saw them already galloping. Furious then that one of his own regiments had started without his orders, he galloped for the Colonel as fast as he could, but he only got as far as the second echelon, on the flank of which he charged with his Staff, thinking that the offensive movement had gone too far for him to check it."

The result appears to be, from all this evidence, that the Marshal and, above all, Frossard, wished the 3rd Lancers and Cuirassiers of the Guard to charge, but that General Desvaux and du Preuil thought, not without reason, that the moment was badly chosen. It may be asked how the isolated offensive of two German battalions constituted a danger sufficiently real to justify a cavalry attack under circumstances which were unfavourable. These two battalions threatened so slightly a strongly held position, that their offensive would have soon died away of itself without the charge of our cavalry. This attack was then not indispensable. In ordering it Bazaine and Frossard showed what little confidence they had in their troops and in their probable success. They demonstrated once more that the position of a Commander-in-Chief or of the Commander of an Army Corps is not in the firing line, where they are in close contact with all the excitement of the fight, but in rear, where they are able to take a broader view of the "tout ensemble" without allowing themselves to be distracted by the most trivial occurrences.

As it was, Du Preuil wished to wait until the enemy's infantry was nearer, in order to surprise it when it approached the crest to the south-west of Rezonville. He was still reconnoitring

the ground when the 3rd Lancers, and soon after the Cuirassiers of the Guard, started to charge.

Du Preuil's Brigade, in column of troops, had come about 11 a.m. from its bivouac at the Gravelotte Post Office to the north-west of Rezonville. "Some moments after" the General formed the Carabiniers in line to the north of Rezonville, while the Cuirassiers crossing the Mars-la-Tour road, were going to take up the same formation on a front parallel to the road from Rezonville to Gorze, and between this road and the point 308. They thus faced west.

Meanwhile the 3rd Lancers had left their first position in the second line of Lapasset's Brigade, to come also to the south-east of Rezonville. Captain la Pommeraye, of the Staff of the 2nd Corps, brought them the order to charge at the moment when the regiment coming from the south was about to clear the front of the Cuirassiers of the Guard at 12.30 p.m.

Like the Cuirassiers, the 3rd Lancers deployed facing west, and then descended the slopes following a direction parallel to the road. But the ground over which it advanced was intersected with hedges, which broke up the advance and caused such a disorder in the ranks, that all the squadrons and troops were mixed up in a confused mass. Another officer of the Staff came to stop this failure. Colonel Torel rallied his squadrons behind the right of the Cuirassiers, and almost at the same time received a new order to attack without any objective being indicated to him. According to the report of General du Preuil, Frossard said to him: "Charge the batteries (?) at full speed and as soon as possible." The records of the 3rd Lancers read that "the regiment was ordered to charge the Prussian infantry." It was only a question between the batteries at the cemetery or of Hildebrand's battalions. But this contradiction shows that the objective of the charge had not been exactly determined on. As it was, the first and second squadrons with the Colonel and Lieut.-Colonel at their head, started their gallop, followed at some distance in rear by the other two. They passed the first crest to the west of Rezonville, up to this time in perfect order. "The two squadrons were well closed up; the lances at the engage presented a magnificent alignment." But in arriving at the beginning of the Flavigny valley our lancers debouched at 400 metres in front of the two Prussian battalions, the same which Captain Hildebrand had brought up.

According to Major Kunz the 6th and the 7th companies of the 52nd Regiment were in front covered by their skirmishing companies; the 12th company of the 12th Regiment and portions of the 9th were to their left, slightly behind. The remainder of these two battalions followed in the second line, the 5th and 8th of the 52nd Regiment in column of companies, and the companies of the 12th in a thick line of skirmishers, denser in the middle than at the extremities.

The third battalion of the 12th Regiment had only two lieutenants unwounded; it was very badly led; besides, parts of it which were deployed into the first line were unable to advance

as quickly as the 52nd, because they were higher up on the slopes of the Flavigny valley, and were therefore more exposed to the fire of the 9th Regiment, which still lined the Mars-la-Tour road.

Already our two squadrons had lost their alignment. An unlucky order made them incline to the right, so that their two left-hand troops only arrived nearly up to the skirmishers of the 12th Regiment without reaching them. A volley, fired at about 60 metres, put *hors de combat* 17 horses and 12 troopers in these two troops alone. The remainder of the first and second squadrons inclined more towards the road, and came to a stop before its ditches, after having charged literally into the air. A witness writes : "I am certain that nothing would have resisted this charge if it had been well led. Unfortunately someone shouted to the first squadron, "To the right, to the right," and the direction, which had been at first well taken up, when we had the square right in front of us, was so changed during the charge that only the 3rd and 4th troops of the 2nd squadron reached the left corner of the square; we did nothing except receive a volley at about 60 metres."

Colonel Torel, nevertheless, was able to rally his two squadrons with comparatively little loss, thanks to the charge of the Cuirassiers, who followed him immediately and attracted all the attention of the Prussians.

The 3rd and 5th squadrons of the 3rd Lancers, which had followed the leading squadrons at a great distance, wheeled about almost at once. General de Preuil wrote in his report : "The two last squadrons lost time in manoeuvring, and the Cuirassiers started in front of them. In fact, the charge of these four squadrons had no result. We suffered heavy losses without any compensating loss on the part of the enemy, and we hardly stopped the latter's progress as we shall see later."

The check of the 3rd Lancers is due to several causes :—

1. The charge was badly timed; the two German battalions were not disorganised after a stiff fight, nor sufficiently weakened by losses.
2. An absence of preliminary reconnaissance which led to the false movement of which we have spoken at the commencement of the charge.
3. The direction was insufficiently indicated, or badly taken up.
4. The attack was directed on the enemy's front, instead of charging obliquely or on the flank, which would not have been perhaps impossible.
5. The formations adopted were bad. Against the infantry it seems that a formation in echelon of squadrons would have been more advantageous.

(To be continued.)

enough to be able to do so. The author has given a good account of the various schools of thought, and has also given a good account of the various schools of thought.

FRENCH AND GERMAN TENDENCIES WITH REGARD TO THE PREPARATION AND DEVELOPMENT OF AN ACTION.

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Translated for the General Staff from the *Revue Militaire Générale*, January, 1907.

(By kind permission of the Director, Général H. Langlois.)

IN the following article we propose to point out the ideas and views, expressed by the most authoritative French and German military writers, upon the development of a modern battle.

Both schools of thought reject any fixed formula or "normal type," of action, and insist upon the adaptation of the means available to the circumstances of each case. They both agree, also, that strategy is the product of the character and intelligence of the Commander-in-Chief, and bears the stamp of his personality.

In the following lines, therefore, there will be found no attempt to describe typical battles, but only an indication of the *tendencies*. It is necessary to make this preliminary remark, because, with a view to clearness, we shall sometimes have to be more dogmatic than is, strictly speaking, admissible.

The tactical preparation of an action will be treated at some length, as it is precisely upon this point that opinions most differ in France and Germany.

1.—PREPARATION.

The Advanced Guard.—In France the general advanced guard has for its objects:—

1. To ensure the security of a march.
2. To obtain information concerning the enemy, within an area proportionate to the strength of the force; the routes he is using or neglecting to use; his strength and, if possible, his intentions, with a

view to enabling the commander of the force to decide in what direction he will move, what dispositions he will adopt for the march, and for the concentration of his troops. The advanced guard thus makes it possible for the columns to remain separate for the purpose of movement and supply.

3. To give the commander of the force time for carrying out his plans in spite of the enemy; and to enable the troops in column of route to take up formations with a view to action.

As soon as contact has been once obtained, the advanced guard will continue to carry out its two-fold work of reconnaissance and protection. By its action it will secure:—

a. For the commander of the force: The *definite data* required to enable him to act with the full knowledge of the situation, in ordering and carrying out (even in spite of the enemy) "a *definite* manœuvre, based upon, and in conformity with, the circumstances" (Lieut.-Colonel Foch).

b. For the troops: A solid and strong barrier, under cover of which they will carry out the preliminary movements which may lead to victory.

In short, the object of the advanced guard is to obtain information and secure freedom of action.

"The conception of an advanced guard (which applies to a detachment, an army, and indeed to a group of armies) dominates all questions connected with the art of leading in war. This is so true, that an officer confronted with any given strategic or tactical situation, will avoid making any very gross mistake if he thinks, first of all, of the advanced guard and at the zone of protection which it affords" (General Bonnal).

The employment of strategic advanced guards composed of all three arms—a consequence of the permanent necessities of war—is also a result of the increased size of armies, and of their sub-division into great independent bodies of troops. The employment of such advanced forces made its first appearance under Napoleon, as Clausewitz explains:—

"Frederick the Great used to form his advanced guard of some thousands of cavalry (furnished, as a rule, by the cavalry on the flanks of the first line) who, as soon as the march was finished, rejoined their main body.

"Bonaparte, who possessed no less decision of character, and whose troops were quite as capable of manœuvring as those commanded 40 years before by Frederick II., almost always covered the movement of his army by a strong advanced guard. There were two reasons why the action of Bonaparte was, in this respect, so different to that of Frederick.

"First, great changes in tactics had been introduced. An army was no longer led, on the field of battle, as a homogeneous, concentrated, and indivisible mass manœuvring under the direct

command of its chief, and, so to say, almost within reach of his voice. A battle was no longer one single action, but consisted of a greater or less number of concomitant actions—either simultaneous or successive. The general plan of action had, therefore, to be sub-divided into subordinate plans, and the chief command into subordinate commands, all acting in accordance with the views of the Commander-in-Chief. Now, at the moment when the presence of the enemy is signalled, in order to arrange so complicated a plan and to make suitable dispositions, both *time* and *information* are required, and these can only be secured by a strong advanced guard capable of *investigation* and *resistance*.

“Secondly, modern armies are much larger and occupy a much wider expanse of country, which is another reason for covering them with strong advanced guards. Frederick the Great led from 30,000 to 40,000 men, whereas Bonaparte brought some 100,000 to 200,000 men into line.”¹

The Germans, reverting, it would seem, to the traditions of Frederick the Great, are inclined to form their advanced guards (in the case of an army) of cavalry divisions only.

“The strategic advanced guard,” says General Schlichting (considered to be the leading exponent of Moltke’s doctrine), “must not be rejected in all cases, but its employment can no longer be maintained as a rule. Without being formally tabooed, it will no longer be formed except under exceptional circumstances.”

“The idea of launching strong mixed bodies of troops in advance of an army is far from being justified in all cases. On the contrary, the principle must be unreservedly accepted, of pushing forward strong masses of cavalry, reconnoitring far to the front, whose duty will be to furnish the necessary data to form the basis for decisions to be taken.”²

The Napoleonic principle: “engage, and then one sees,” does not apply, in Germany, to the General Commanding-in-Chief; it is doubtful if even the subordinate commander, who does the fighting, troubles his head much about it.

This tendency, on the part of the Germans, is explained by their confidence in the numerical superiority and efficiency of their cavalry. It may also be due to the fact that their military education, bearing the stamp of their national character, and also of the daring and hopes begotten of a prolonged succession of victories, enables them to come to a decision quicker, and upon less complete information. They consider that the secret of victory, and even of security in war, lies above all in a strong will, dominating that of the enemy, and carried into effect with overwhelming rapidity and the utmost energy. With them it is not the situation accurately known that should rule the offensive, but a rapid and forcible offensive which should *create* the situation, of which full advantage is to be taken.

¹ “Théorie de la grande guerre,” tome I, p. 275.

² *Truppenführung und Heereskunde* 1905, p. 175.

"This determination to operate according to a *preconceived* plan must be carried to such a point that the enemy, notwithstanding any projects he may have been able to form, shall be compelled to submit, without reserve, to the law laid down by our own initiative" (Von Bernhardi).

But a knowledge, at least approximate, of the distance of the enemy, of the area within which he is moving, and of his movements, is indispensable to the commander of an army, to ensure its timely concentration, and to furnish the elements necessary for a decision—even if it be "preconceived." On account of the slowness and torpor of the movements of an army, where situations can only be created or modified slowly, the Germans hope that their cavalry divisions, grouped if necessary into powerful masses, will furnish a series of reports extending over several days, which, completed by those of their secret service—excellently organised—and by the inherent conditions of the general situation, will afford, as a rule, adequate information. In case of need—and this will often occur—they will have recourse to hypothesis.

"In order to solve a tactical problem," says Moltke, "we must first put ourselves in the position of the enemy, and ascribe to him the most judicious measures."¹ "Are not the enemy's rational measures the best foundation we can give to our own combinations?" (Von der Goltz).

Even in the days when the infantry weapon fired slowly, had a short range, and was liable to miss fire if it was raining, *i.e.*, when cavalry was much more powerful compared with infantry (the advanced detachments of which it was capable of handling very roughly), Napoleon, at any rate, considered it desirable, as a rule, to form his advanced reconnoitring force of all three arms. Moreover, notwithstanding his intellect, he avoided formulating theories. Views vary to a wonderful extent, and even a rational basis of argument is still singularly fragile; the war of 1870 alone is enough to prove that fact.

However that may be, to employ cavalry as a general advanced guard is to entrust the security of the troops, and the commander's freedom of action, to the most unstable arm of the Service.

Both of these points are, no doubt, secured as long as the distance to the enemy is greater than the front upon which the columns are marching; but they both become subject to very grave risks as that distance diminishes, for the defeat of a mass of squadrons is both sudden and rapid. Moreover, cavalry is the arm, above all others, which is especially affected by moral factors: ability of the commander, chance, the nature of the ground, etc. A numerical superiority is a less certain guarantee of success with cavalry than in the case of any other arm. Even if victory obtained a precarious security for the army in rear, the reconnaissance would be limited in extent, owing to the lack

¹ Thèmes tactiques, solution du thème No. 51.

of resisting and penetrating power of cavalry, even if accompanied by artillery and supported by machine guns, cyclists, and small detachments of infantry.

Armies which renounce advanced guards of all three arms run the risk of a strategic surprise, and of making a useless or false manœuvre. Rapid and energetic action on the part of a general, both clear sighted and happy in his combinations, can alone avoid or palliate the inconveniences of such an arrangement, which would be extremely dangerous in face of an active adversary.

The General Reserve and the Decisive Attack.—The trend of German opinion, with regard to the employment of reserves, and the decisive attack is clearly shown in the following lines written by Major Kuhl, of the German General Staff.¹

"The study of Napoleon's campaigns still shows us the great general and eternal principles of command in war; but it is an exaggeration to assert that working tactical examples, capable of application at the present day, are to be found in those campaigns. This is certainly the case when attempts are made to copy nowadays the Napoleonic method of fighting an action, which consists in holding the enemy everywhere, and in bringing up reserves in mass, acting upon the Commander-in-Chief's own order, to deliver the decisive stroke at a point selected by him. Such methods have become impracticable. . .

"The question arises whether, in the great battle of the future, it will be possible to deliver the decisive stroke by means of a reserve. The latter could only intervene where the situation was ripe for such intervention. But will the Commander-in-Chief be able to detect, from the spot where he may be, the point suitable for such action? If he is, will the reserve have time to move up to it, with the enormous extent of front taken up by modern armies? The history of recent campaigns affords no example upon which to base an assertion in the affirmative.

"Even if the moment were propitious, there would still be reason to ask if such intervention on the part of a general reserve would be useful. It is certainly not so when the fire preparation has been thorough, for in that case the troops in rear, in the same section of the battle-field, are sufficient to give to the firing line the moral support it requires to dash forward to the final assault. If, on the contrary, the situation is not ripe, the reserves, because of their mass, would certainly suffer a catastrophe.

"The employment of a general reserve, at all events in the Napoleonic sense, such as is represented in certain quarters, even amongst Germans, as being strictly practicable, is, as a matter of fact, no longer admissible. We shall no longer see decisive strokes, like those at Wagram, Gross-Görschen, and Ligny, upon the battle-fields of the future.

"Is it, then, necessary to have a general reserve?

¹ *Truppenführung und Heereskunde*, 1904, p. 64, *et seq.*

"It is manifest that each of the great bodies of troops distributed along the front, as also their sub-divisions, will need local reserves to feed the firing lines, and to keep up the maximum intensity of fire. This is the principal reason for the deep formation. But these local reserves are sufficient to give to the firing line the moral support necessary to carry it forward to the assault, and also the feeling of being supported. Contrary to the French opinion, according to which the commander should give the order for the decisive attack, it seems probable that the signal for the assault will be given by the fighting line.

"Then what should be the position of the general reserve?

"In the centre it would be best available for a central attack. But this form of attack has become more and more difficult and unsatisfactory, as the increased range of modern firearms has made it possible to bring a more powerful concentration of fire to bear upon an assailant, whose advance takes the shape of a salient. If, on the other hand, it is proposed to use this reserve on a flank, it will be difficult to do so at the time and place selected, as it would have to make a flank movement in rear of the front. As a flank appears to be the most suitable place for employing the reserve, it will be put there as a matter of choice. But in that case why not push it up beforehand, especially as it would then be in a position to envelop the enemy? One may say what one will against the mania for enveloping movements, but surely no one can deny that *envelopment is the most effective form of attack*, because it is the only certain means of deploying superior numbers of guns and rifles, with a view to developing a converging fire, and promises the best results by operating on the flanks and rear of the enemy?"

Von der Goltz also says: "Recent great battles have been won by an enveloping attack directed against one of the enemy's flanks. It is the same idea as that upon which Frederick the Great's attacks, with an oblique line, were based; an idea which should guide us during the prelude of every action."

The result is, as Major Kuhl again says:—
"In modern war the general reserve will be used to bring a converging fire to bear upon the enemy by means of an enveloping movement, rather than held back, massed in army corps, behind the front, ready to act. But the most favourable case of all will be when, as at Sadowa, the envelopment of the enemy has been effected by the converging march of separate fractions of an army."

"In renouncing the decisive shock of massed reserves, the Commander-in-Chief in no sense abdicates his powers. His action—perhaps now more delicate than ever—will show itself at another time, *i.e.*, in the preparatory movements of a battle.

While the battle is going on, the commander will retain at his own disposal only a small reserve, with the object not of directing the course of events, but of parrying any unforeseen occurrence. At great manœuvres, these reserves, when they

exist at all, barely amount to one-eighth of the total effective strength, and are sometimes considerably less.¹

Major Kuhl, in the passage quoted above, in common with the vast majority of German writers, and in consonance with the constant practice at the Imperial manoeuvres, is inclined to advocate a converging or enveloping movement, carried out by the advance of a line of columns on a wide front. "No one denies," he says, "that this operation has certain drawbacks; for instance, the battle must develop on the lines already prepared, for the General Officer Commanding will not be able to introduce any great or essential modification in the distribution of his forces." In fact, only partial and local modifications can be carried out in the form of voluntary assistance given by a subordinate commander (*e.g.*, the commander of an army corps or division) to a neighbouring force less favourably placed, with regard to ground or the general situation, than himself. Such cases of initiative, which must be unreservedly approved, occurred in 1870, and have been seen occasionally in great manoeuvres.

In conclusion, Major Kuhl adds the remark—which is, in fact, an admission and the best criticism of the method in question—"if the stroke is not successful at once, it has failed!"

The deep formation recognised in France does not suffer from this drawback. Thanks to this formation, the future remains, to a large extent, still open; a clear-sighted and alert commander will be able to remedy—at least, to some extent—mistakes due to incomplete or false information, to the unforeseen, to unfortunate accidents, to his own fault or those of his subordinates, all of which are things which form the current coin of war.

But however this may be, the Germans, with a line of columns marching on a wide front, will generally be in a position to oppose the French general advanced guard with forces rapidly becoming superior and capable of taking it in flank. Modern armament makes a frontal attack more difficult and more lengthy, while at the same time it makes an enveloping attack more fruitful and rapid. It will therefore be well for the French advanced guards to cover a wide extent of country, and also to be strong in artillery, with a large supply of entrenching tools; arrangements must also be made—a difficult

¹ Examples:—

On the 10th September, 1896, Field-Marshal von Waldersee kept six battalions, out of 50, at his own disposal.

On the 13th September, 1899, out of six divisions, the King of Wurtemburg kept only one regiment, which he placed in rear of the centre.

At the Imperial Manœuvres in 1901, the Commander of the XVIIth Army Corps, who commanded on one side, kept four battalions and three batteries in reserve, *i.e.*, barely one-twelfth of his strength. He used these troops to fill a gap which occurred in his line of battle, and not for a decisive attack.

matter enough, in view of the depth of the army's formation—to ensure a prompt supply of ammunition. Moreover, the *moral* of commander and troops alike must be particularly high.

But the French advanced guards, by acting as a bait, will have the advantage of misleading an enemy relying upon brute force, and inducing him to deploy in a wrong direction. Meanwhile the main strength of the French army will remain available for operations, the success of which may be reasonably expected, because the enemy will require a very considerable time, proportionate to his strength, in order to rearrange his columns and to correct such a mistake.

The Strategic Advance.—In view of the general situation and of the instructions he has received, the Commander-in-Chief of an army has at his disposal, even before the advanced cavalry forces meet, a mass of data sufficient to enable him to come to a decision and to select a primary objective.

It is then that, on the French side, the composition is decided of one or more advanced guards, pushed forward into the zones where reconnaissance or screening operations are especially necessary. The army, as a whole, remains in a deep formation, and gives no clue to the plans of the commander, nor to the operations which he will undertake, for nothing is yet definitely decided. If the general situation be very obscure, as, for instance, at the beginning of 1806, the army would be in a lozenge-shaped, square, or échelon formation, capable of facing in any direction, and also of moving out a body of troops as an advanced guard to oppose the enemy wherever he might show himself.

The German army, preceded at a distance of several marches by the bulk of its cavalry, advances in a formation which would vary according to circumstances. All the army corps might move abreast, or in certain cases some of them might remain in second line. Should the roads available make this necessary, or if the obscurity of the general situation makes it desirable to provide for the possibility of an eventual change of direction, it would then be advantageous to take up a provisional formation approximately equal in breadth and depth (e.g., the IIIrd German Army, in the middle of August, 1870, marching from Nancy towards Châlons).

The extent of front which the army could take up without danger depends upon the urgency of the question of concentration for action, *i.e.*, upon the distance from the enemy (von Blume). Security is, in fact, based upon information alone, for cavalry can hardly stop, or even seriously delay, a hostile force of all arms. According to recent views, an engagement is either declined or accepted. In the latter case the general disposition is modified according to circumstances, the front (upon which the advance is being made) being closed upon the centre or upon a flank, as may be most suitable.

As soon as the situation admits, the manœuvre decided upon is carried out.

At the approach of the enemy (at least 24 hours beforehand in the case of an army—von Blume), the original alignment is modified, and the army takes up an échelon or concentric formation, with a view to enveloping the enemy wherever he may be met, and also *at first, the zone in which he is moving*.

"The Commander-in-Chief decides which of his two flanks will make a demonstration or remain on the defensive and which one will take the offensive" (von Scherff).

"He will divide his forces into a principal attack and a secondary attack, allotting the largest possible number of troops to the principal attack" (Griepenkerl).

It is essential to economise the troops along the front. The principal attack being decided upon *à priori* according to the information received from the cavalry, is always subject to considerable uncertainty as to the strength of hostile troops which will be met with. The attack may come in contact with fresh lines. The Germans, therefore, in default of the security which comes from a knowledge of the enemy's dispositions, provide themselves with that which comes from a strong force, and provide against the unknown by numbers.

"In order to be certain of victory," says Clausewitz, "numerical superiority must be such that it alone compensates for all other factors capable of telling in the enemy's favour, such as the ability of his commanders, the *moral* and training of his troops, luck, etc."

The corps which are to deliver the frontal attack move by divisions or brigades, making the utmost possible use of roads available; those which are to execute the enveloping attack keep a deep formation, in view of the great efforts which will be demanded of them. In their vicinity the masses of cavalry will be collected when they have to clear the front. The cavalry will do its utmost to provide information for and to cover and mask this attack.

In short, even before the enemy is met with, the Commander-in-Chief will have distributed his forces and assigned the parts they are to play. He launches his army and "prepares" the battle.

The significance of the dispositions made, however, will not be missed by a wise adversary; the German method will, therefore, scarcely enjoy the advantage of surprise.

II.—THE DEVELOPMENT OF AN ACTION.

The Deployment and Preliminaries.—As soon as an action has become imminent, the German columns break up, and brigades, regiments, and even battalions making the utmost use of the roads and communications available, or marching across country, "are directed obliquely upon the points where it is desired that they should be with a view to action. In order to reduce the fatigue, these minor columns will remain in column

of route as long as possible.¹ This method is mentioned in the regulations as being "the best" way of taking up a fighting formation from the order of march. Its advantages are the rapidity of deployment and of advance upon the enemy, thus allowing him no time to ascertain or reconnoitre his own position—essential conditions in every preconceived operation.

Each of the smaller columns is preceded by a tactical advance guard, generally of small strength, and even in the case of mixed brigades (six battalions and six batteries) usually composed of infantry and cavalry only. "Owing to the changes introduced in the methods of strategic reconnaissance, the importance of these advanced guards of each individual column is greatly diminished; the advanced guards themselves are now nothing but the first step in the deployment" (General Schlichting). Their duty, which comes to an end when real fighting begins, is above all to secure for the main body a steady march without checks or useless halts.

"The rôle of an advanced guard comes to an end," says Griepenkerl, "at the moment when the commander of the detached force decides to carry on the fight with the whole of his troops. . . . The advanced guard is only a means of security during the march; it is therefore only justified when on the march, or perhaps, as an exceptional case, when it can itself engage an enemy of inferior strength."²

The opening phases of an action are carried out with caution. In the face of forces estimated, or known to be superior, the Germans immediately assume a defensive attitude, unless the ground necessitates an attack upon some point, the possession of which is essential for the deployment. If they wish to strike an early blow they also wish to strike rapidly and heavily, and this requires troops; they will therefore wait until sufficient troops are ready to their hand. The first reinforcements to come up will be the *mass* of their batteries, which they systematically place at the head of their columns. The artillery, in fact, is the arm capable of forming most rapidly a resisting barrier, such as is necessary to allow the troops to come up undisturbed, without itself ceasing to be generally available, and therefore without compromising the commander's freedom of action. But the deployment of the batteries takes time, and as numerical superiority is considered the best means of ensuring superiority of fire, the first groups of batteries to come up will avoid coming into action if they do not feel strong enough to do so, and will only do what may be necessary to ensure the security of their infantry. They will conceal themselves and make all possible use of the ground.

The preliminaries of an action, therefore, will tend to have the appearance of being slow; and this will be a certain sign, not

¹ Art. 346 of "The Field Service Regulations of the German Army," 1900.

² Thèmes tactiques, 13ème lettre.

of any intention to decline engagement, but that the Germans do not yet feel themselves strong enough to be able to carry it through with the extreme energy characteristic of their methods.

The Frontal Action. — We saw above that the German Commander-in-Chief, owing to lack of definite information available at the time of making his plans, was obliged to be extremely economical of troops on his front. This will necessarily influence the attitude of those troops. Having, first of all, to secure the enveloping movement, they will remain, for the moment, in an expectant attitude, economising their infantry and, as far as may be, bringing their artillery only into action. They will pay very special attention to holding certain points strongly, with a view to being able to defend them eventually against even the *main* body of the enemy, victory in such a case depending chiefly upon the duration of the defence made.

Their tactical inferiority will cease as soon as the enveloping movement begins to make itself felt. They will then attack with the utmost energy, and will (equally with the turning force) aim at the overthrow of the enemy. In short, the frontal engagement will almost always be, *at the beginning*, purely defensive.

The German infantry will have performed the first part of its duty in the demonstrative portion of the battle-field when it has reached "effective ranges," *i.e.*, about 1,000 to 1,100 yards, with the present rifles, in open country.¹ There it will remain. In this position it undoubtedly gives security to the manoeuvre being carried out by the enveloping flank, and menaces the enemy; it is in a position rapidly to seize any points held by the latter, if they are evacuated, but it only "holds" the enemy's front line, and has no effect upon his reserves.

The German troops, then, so far from "holding" or "immobilising" the enemy at the commencement of an action, become "fixed" and "immobilised" themselves. A mere screen will suffice to deceive them.

In France, in accordance with the Napoleonic tradition, the frontal engagement tends to be at the outset more active and vigorous, with a view to enabling the Commander to "see." The active, offensive, reconnaissance, begun by the advanced guard, is carried on, "holds" the enemy, wears him out, and makes every effort to *find*, or to *make*, the weak point in his dispositions, upon which the decisive attack will be launched.

The General Course of the Attack. The Assault. — The following lines describe in general terms the development of an attack, special attention being drawn to the peculiarities noticed in Germany.

As infantry is unable to make any serious attack until the artillery has gained a certain amount of superiority, it is by

¹ This is the distance at which the curve of the trajectory and sufficient visibility make effective fire possible; and, conversely, when the enemy's fire becomes so effective, for the same reasons, that it is impossible to advance further without replying, in order to reduce the effectiveness of such fire.

the action of the batteries (which at this stage play a leading part), that the Germans open an engagement. But they will be obliged, first of all, to force the enemy to accept the duel. With this view the infantry, supported by a liberal allowance of batteries, masked as far as possible, will attack, in thin formations, offering a difficult target, any *points d'appui*, the loss of which would be specially felt by the enemy. The latter will thus be forced either to evacuate his advanced posts before the combined action of the two principal arms (which is overwhelming at the present day) or to bring his own guns into action (Hoffbauer).¹ The duel thus begun will be continued with the greatest possible vigour, and will last long hours. Numerical superiority and concentrated fire are considered to be the best guarantees of success. The German artillery, massed in great batteries, which facilitate the technical control of fire, rarely changes its position; it manœuvres with its trajectories rather than with its guns.

The infantry, relieved of the hostile batteries opposed to it (their attention being held elsewhere), will push forward, making the best possible use of the ground until the "main fire position"² is reached, where every effort will be made to obtain superiority of fire, which is considered a necessary condition before any further advance. The essential principles of fire control are, as in the case of the artillery, (a) effective power, which implies the use of strong firing lines; and (b) concentration of fire, which leads to a tendency to employ enveloping tactics in this stage of the fight, as well as in the case of tactics on a larger scale. "Nowadays, with small-bore magazine rifles and Q.F. guns, every tactical consideration must aim at obtaining supremacy of fire. Battle tactics have become, above all things, fire tactics, which mean the art of directing a superior volume of fire in the most suitable direction. It is upon this essential consideration that the advance, the deployment, and subsequent movements in action are all based" (Major Kuhl). To crush the enemy's front by a hail of bullets, to turn his shelter trenches, to make the utmost use of long-range rifles to enfilade and demoralise his lines, there are the objects constantly kept in view by the German infantry.

The batteries which are available (the number of which will increase as success in the artillery duel declares itself), will shell the hostile infantry, and, with a view to acting with still greater promptness and effect, will push forward across the crest lines as soon as they are able to do so, or as soon as the situation requires.

¹ "Zur Frage der Schnellfeuer, Feldgeschütze und ihrer taktischen Verwendung," Mittler und Sohn, Berlin, 1902. As part of the most thorough preparation for action possible, reconnaissance and continuous observation of the battle-field, and a careful watching of events, find a place in German traditions. Many authors either admit or advocate such measures being taken. They appear to have been practised at the manœuvres in 1905.

² At decisive range.

The engagement thus goes on, with the artillery and infantry acting in close combination. Every fresh advance is carefully prepared, without undue haste, by heavy fire; every fresh point taken is rapidly prepared for defence, so as to ensure its being held against any counter-attacks of the enemy. At last the moment comes for the assault.

The assault is only the "consecration of a victory already won by fire." "The superiority of fire must be such that the attacker, having broken down the resistance of the defence, has, in the assault, only to gather ripe fruit. If the assault is carried out under other conditions, if it pretends itself to constitute the power of compulsion which forces the enemy to give way, it is more than probable, in view of the power of modern firearms, that it will fail, and that the attack will get itself crushed" (Dickhut).

"Undoubtedly, in order to dislodge the defender, a hand-to-hand fight with cold steel will be necessary at the last; generally speaking, fire alone will not suffice. But this last dash forward with fixed bayonets is not a second act in the fight, but merely serves to draw the cash for the bill presented to the enemy during the first part of the attack, where the victory was gained by fire. The same determination to win, which enables the assailant to push nearer and nearer and to face the long and obstinate preparatory fighting, at last decides him to assault. But if the *moral* of the defender is still unbroken he cannot be driven out of his position with cold steel, and, indeed, no assault will take place" (Major Kuhl).

III.—SOME NOTES ON DEFENSIVE ACTION IN GERMANY.

The Germans are by no means in favour of defensive action, although its (theoretic) superiority was extolled by Clausewitz and by Moltke. They rightly consider that the advantages accruing from the choice of ground, knowledge of the locality, the preliminary assembly of troops, which makes it possible to offer opposition one way or another for a certain time, etc., are more than counteracted by moral considerations which (owing to permanent psychological conditions, entirely apart from the improvements introduced in weapons and armament) result in the subordination of the defender to the assailant. They also consider that the larger the force the more disadvantageous does the defensive type of operations become. Should an army have to act on the defensive—and there are such cases in war—it would achieve its defensive purpose best by resolute offensive action. This tendency is clearly shown in the great German manœuvres. In a general way the German conception of a defensive engagement is approximately the same as the French. They avoid all premature deployment, endeavour to wear out the enemy by fire, and then deliver a counter-attack. Their methods of carrying out such an action, however, are very different from those contemplated in France.

The main position (strengthened by the preparation of villages, woods, etc., and by the construction of successive lines of trenches, with intervals of some few hundreds of yards between them, the object of which is to stiffen the resistance) has no advanced line of infantry or artillery in front of it. There are no such things as advanced posts within artillery range of the main position; detached posts within effective rifle range of the main position, of which they form an integral part, alone are admissible.

The cavalry, supported by horse artillery, is pushed forward to meet the enemy, to reconnoitre and to delay his advance, furnishing the defender with information, and also giving him time to make his arrangements.

The general reserve is placed in position beforehand. Its duty being to take in flank the hostile force executing an enveloping movement and to catch it in the act of manœuvring, the general reserve will be placed upon the most suitable flank—decided *a priori*—in rear of and beyond the front, at a distance varying according to the strength of the force. If a whole army corps is in reserve this distance might be as much as a short day's march. The flank of the defence which is considered to be less threatened, is covered by defensive échelons.

The attacker, after demonstrations on the part of the defender's cavalry, will come at once under the fire of one single main position, strongly held and substantially fortified. The preliminary phases of the engagement will be characterised by the vigorous and unforeseen deployment of troops which, till then, will have been carefully kept out of sight. Ability will be shown less in making feints than in the sudden development of very strong forces in action.

To sum up, the tendencies are the same in both offensive and defensive operations. The Germans rely upon their cavalry alone for information and security; they manœuvre according to a preconceived idea, and, convinced that the great point at the present time is to obtain superiority of fire, they consider that envelopment offers the simplest and most reliable method of bringing into line more rifles and guns than their adversary.

NAVAL NOTES.

The following are the principal appointments which have been made:—Inspector-General of Hospitals and Fleets J. Porter, C.B., to be Director-General of the Medical Department of the Navy. Captains—A. Y. Moggridge to "Vivid," as Commodore 2nd Class, in command of Royal Naval Barracks, Devonport; C. Greatorex to "Pembroke," as Flag-Captain to the Commander-in-Chief at the Nore; L. Halsey to "Vivid," as Flag-Captain to the Commander-in-Chief at Devonport; C. E. Hunter to "Hermione"; E. R. Le Marchant to "Sutlej"; W. L. Baker-Baker to "Cornwallis"; H. G. King-Hall, C.B., D.S.O., to "Victory" for "Indomitable," for trials; E. H. Moubray to "Vindictive"; C. I. Eyres to "Irresistible"; O. F. Gillett to "Jupiter."

Royal Marines.—Colonel A. F. Gatling, R.M.L.I., to be Colonel Commandant, Portsmouth Division; Colonel F. C. Cotter to be Colonel Second Commandant, R.M.L.I. Dépôt, Deal.

General.—The first-class armoured cruiser *Leviathan* arrived at Plymouth from Chatham on the 8th ult., and Rear-Admiral Denison, Commanding the Devonport Division of the Home Fleet, transferred his flag to her from the first-class protected cruiser *Niobe* the same day.

The first-class battle-ship *Canopus* had her crew completed to full strength at Portsmouth on the 28th ult., for service on the Mediterranean Station.

The first-class armoured cruiser *Suffolk* arrived at Plymouth on the 19th ult., from the Mediterranean; she paid off at Devonport on the 27th ult., and recommissioned on the following day, for a further term of service with the Third Cruiser Squadron in the Mediterranean.

A Series of Disasters.—The past month leaves a black record in the matter of disastrous collisions, which have cost the country many valuable lives, a fine 2nd class cruiser and two destroyers.

On the morning of Thursday, the 2nd ult., the Portsmouth Division of the Home Fleet, under the command of Rear-Admiral Farquhar, with his flag flying in the *Prince George*, left for Portland and exercises in the Channel; the torpedo-flotilla following later with orders to attack the Squadron after darkness had fallen. The destroyer attack was duly carried out a little after 8 p.m., when the fleet was some 18 miles south of St. Catherine's, all vessels having their lights out, and during it the *Tiger*, while crossing the bows of the *Berwick*, was struck by the cruiser's ram and cut completely in two. The fore end of the destroyer sank almost at once, the after part remaining afloat long enough for 13 men to be rescued from it. In all 22 of her crew were saved, 28 being lost, including Lieutenant W. E. Middleton, who was in command. The court-

Home. martial which followed held that no blame could be attached to any surviving member of the *Tiger's* crew, and as there was no evidence to show why the destroyer's course was altered to port, instead of her following her leader, the court considered no blame could be attributable to any deceased member of the *Tiger's* crew, and that no blame in any way attached to the *Berwick*.

On the afternoon of the 25th ult., when the second-class cruiser *Gladiator*, after passing through the Needles Passage, was off Yarmouth, she came into collision, during a blinding snowstorm, with the liner *St. Paul*, outward bound for New York. The bow of the liner crashed into the starboard side of the *Gladiator*, nearly amidships, and just abaft the first funnel. The liner went astern, and the cruiser immediately began to fill, taking a heavy list to starboard, but there was, fortunately, just time to beach her near Black Rock buoy, about 400 yards from the shore, under Fort Victoria. Lieutenant Graves and 27 of her men were reported as missing, some of the bodies having since been recovered. The bow plating of the *St. Paul* was also much damaged, and she had to return to Southampton.

On the afternoon of the 27th, the Eastern Destroyer Flotilla, consisting of 15 vessels, in company with the Scouts *Adventure* and *Attentive*, left Harwich for the purpose of firing exercise and night manœuvres. A little after midnight, all the vessels having their lights masked, the *Gala*, one of the destroyers, came into collision with the *Attentive*, being struck by the latter's ram in the after part of the engine room and cut in two. Fortunately, in this case, all the crew were saved, except Engineer-Lieutenant F. A. Fletcher, who was drowned; the *Attentive* afterwards came into collision with another of the destroyers, the *Ribble*, which received damage sufficiently serious to oblige her to put back to Sheerness. At the time of the collision all the vessels had their lights out; the destroyers had discovered the *Adventure*, but not the *Attentive*. The fore part of the *Gala* sank almost immediately, but the after part, with all the crew clinging to it, remained afloat for some time, sinking while an attempt was being made to tow it into shallow water.

France. The following are the principal appointments which have been made:—Rear-Admiral—J. J. De Percin to be Member of the Superior Council of the Navy. Capitaines de Vaisseau—D. M. Gauchet to "Pothuau"; M. P. L. Jaurès to "Gloire"; J. L. Girard la Barcerie to "Masséna"; A. H. De Spitz to "Marseillaise." Capitaines de Frégate—P. M. Barthes to "Lalande"; C. L. De Paris De Boisrouvray to "Surcouf"; C. M. F. Lainé to "Manche"; P. E. Lamy to "Ibis"; A. L. Harel to Command of Fixed Defences at Lorient.—*Journal Officiel de la République Française*.

General.—An experimental caisson is now being constructed representing a portion of the hull of the new battle-ship *Mirabeau*, with which important experiments are to be carried out with a view to testing the resistance of the hulls of the *Danton* type against torpedo explosions.

France. The bottoms of these battle-ships have, in fact, been constructed with the view of reducing to a minimum the effect of a torpedo explosion, and the experiments are to test the efficiency of the form of hull that has been adopted.

The enquiry held on the boiler accident on board the *Jean Bart* has resulted in the suspension of the chief engineer of that ship for six months.

During the endurance trials of the new battle-ship *Liberté*, between Ile d'Aix and Hyères Roads, she realised an average speed of 17·5 knots for 72 hours, and 19·5 knots for 3 hours. The machinery and boilers (Belleville) gave entire satisfaction.

Admiral Germinet has drawn up the following programme for the cruise of the Mediterranean Fleet. The squadron was to leave Toulon on 29th April and arrive on 1st May off the Algerian coast, where it would be distributed as follows:—At Bona, 1st Division, *Patrie*, *République*, *Démocratie*; at Algiers, 2nd Division, *Justice*, *Liberté*, *Jules Ferry*; at Philippeville, 3rd Division, *Saint Louis*, *Charlemagne*, *Gaulois*; at Oran, 4th Division, *Bouvet*, *Jauréguiberry*, *Suffren*. The squadron was to rendezvous at sea on 8th May and then proceed together to Algiers, leaving again on the 11th for Hyères.

Prize Firing Returns.—The target practice returns for 1907 have been published, and the following ships are given the first place in their respective classes:—

Heavy Guns.—Battle-ship—*République*, Commandant Pires. Cruiser—*Bruix*, Commandant Rochas.

Medium Guns.—Cruiser—*Desaix*, Commandant Moreau.

Light Guns.—Cruiser *Dupetit-Thouars*, Commandant de Gueydon. Destroyers, bracketed equal—*Belier*, Commandant Gilly; and *Arquebuse*, Commandant Mouchey.

Torpedo Flotillas.—Destroyer—*Epée*, Commandant Noël. Sea-going torpedo-boat—*Rafale*, Commandant Docteur. Torpedo-boat No. 252, Commandant Lang.

The flotilla gaining the greatest number of points is the 2nd Flotilla in China, commanded by Commandant Martenol.

As a result of the target practice for 1907 the challenge cups held by the *Jauréguiberry*, *Amiral-Aube*, and *Desaix* will now go to the *République*, *Bruix*, and *Desaix*.

French Naval Guns.—Quite recently the Minister of Marine has ordered twenty-four 47-mm. guns on board the armoured cruiser *Victor Hugo* to be changed. This is a most serious matter, as it shows that the whole batch of these guns are defective, and they have been removed before they have been actually used, as the defects became apparent during the gun trials.

"It is one more fact to the discredit of our naval artillery," writes the *Temps*, "and another reason for demanding the reconsideration of the *projet de loi*, which created the corps of *Ingénieurs Artilleurs*. There has certainly been fault somewhere, either in the plans or in the manufacture of these

light guns. There has been disagreement and conflict of France. opinion between the central direction of artillery at the Ministry of Marine responsible for the design and the gun foundry at Ruelle, which constructed the guns. The matter was settled, it would appear, in favour of the *Direction Centrale* by this department itself; but it would seem that as the plans are said not to be at fault and no proof has been given of bad workmanship that we have not got any further towards finding out who is to blame.

"When M. de Lancassan was Minister of Marine he established a *Contrôle Technique* over naval artillery as well as over naval construction, and it was the duty of this control department to keep the Minister of Marine fully informed on questions such, for instance, as this matter of the light guns of the *Victor Hugo*. Unfortunately it did not survive the Minister who created it, and in spite of protest was abolished on the ground of expense. The result is, we now find one of our best armoured cruisers demobilised with twenty-four of her guns absolutely useless.

"These things must not be allowed to continue. The misfortunes of our naval artillery date back to the time when the Colonial Artillery, which formed its *personnel*, was transferred to the Ministry of War. It is changes such as these which are the chief cause of all this trouble."

With regard to the statement that has been made that French naval guns were not capable of such rapidity of fire as has been arrived at abroad by other Powers, the *Temps* states that after making full enquiries it has come to the conclusion that the guns to be mounted in the new battle-ships will be quite equal in this respect to the guns of foreign Powers. The turret mountings constructed by the Homécourt Company, and the improvements in loading and pointing that have been adopted have proved so successful that the company is able to guarantee at least four shots per minute for the 194-mm. (7·6-inch), three shots for the 240-mm. (9·4-inch), and two shots for the 305-mm. (12-inch) guns. Thus each of the new armoured cruisers should be able to throw a weight of 4,800 kilos. (10,576 lbs.) and the new battle-ships 11,500 kilos. (25,338 lbs.) of projectiles per minute.—*Le Temps*, *Le Yacht*, and *La Vie Maritime*.

The following are the principal promotions and appointments Germany. which have been made: Vice-Admirals—Graf von Baudissin to be Admiral and Chief of the General Staff of the Navy; Breusing to be Director of Dockyards at the Ministry of Marine; Zeye, from Inspector of the Torpedo Department, to be Admiral Commanding Torpedo Establishments and Vessels. Rear-Admirals—Von Usedom, Schröder, to be Vice-Admirals. *Kapitäns sur See*—Freiherr von Schimmelmann, Merten, von Bassewitz, to be Rear-Admirals; Zimmermann, to be Superintendent of Wilhelmshaven Dockyard; Musculus, to Command of 2nd Dockyard Division; Paech, to Command of 2nd Seamen's Division; Meurer, to "Stein"; Louran, to "Hertha."—*Marineverordnungsblatt*.

General.—The new turbine cruiser *Stettin* was commissioned on the 1st of February at Kiel by the crew of the *Frauenlob*, whose place in the

Germany Cruiser Division of the 2nd Squadron she takes. The crew which has been manning the *Stettin* during her trials has been turned over to the new cruiser *Stuttgart* (a sister-ship) at Danzig, for her trials, which have commenced.

The new first-class armoured cruiser *Gneisenau* is to take the place of the *Friedrich Karl* in the Cruiser Division of the 1st Squadron.

The repairs to the first-class armoured cruiser *Scharnhorst*, which, while running a full-speed trial on the 15th of January off Kiel, struck on a shoal and sustained serious damage to her bottom, the plates of which were ripped open for a length of over 90 feet, 24 of the frames being either broken or twisted, have now been completed at the yard of Blohm & Voss, Hamburg, where the ship was built, and the ship has begun a series of speed trials.

Launches.—On the 5th of March, in the presence of the Kaiser, the Grand Duke and Duchess of Baden, Prince Henry of the Netherlands, Prince Henry of Prussia, and a large number of high officials, the new first-class battle-ship *Ersatz Bayern* was successfully launched from the Imperial Dockyard, Wilhelmshaven, and named the *Nassau* by the Grand Duchess, who is a Princess of that House.

The *Nassau* is the first of Germany's ships of the *Dreadnought* type to take the water, and great secrecy has been observed about her by the authorities, the naval attachés of foreign Powers not being allowed to be present at the launch, while foreign Press correspondents were also excluded. Her real dimensions have not yet leaked out, but it is believed that she has a displacement of 18,000 tons, and that her speed is to be 19 knots, which will probably mean 20, as all recent German battle-ships have attained on their trials quite a knot more than the speed with which they were supposed to be credited. Her armament also is not definitely known, though in well-informed circles it is believed that it is to consist of twelve 11-inch 50-calibre guns, with a secondary battery of twelve 6·6-inch Q.F. guns and eight 3·4-inch Q.F. guns, with six submerged torpedo tubes for discharging the new 19·5-inch torpedoes.

The next ship of the type to be launched will be the *Ersatz Sachsen*, which is building at the Weser Yard, Bremen, and which is expected to take the water next month.

The new first-class armoured cruiser *E* was launched on the 11th ult. from the Imperial Dockyard, Kiel, in the presence of Admiral Prince Henry of Prussia, Commander-in-Chief of the German High Sea Fleet, and received the name of *Blücher*. She is the first of Germany's new armoured cruisers, and has a displacement of 15,000 tons, thus showing a considerable advance over the *Scharnhorst* and *Gneisenau*, both vessels of 11,600 tons, which up to now have been the largest and most powerful of the German cruisers afloat. It is stated that she is to carry an armament of ten 11-inch 50-calibre guns, thus making her in this respect a match for the *Indomitable* and her sisters with their armament of eight 12-inch guns.

The German authorities seem to have definitely decided upon their new pattern 11-inch 50-calibre gun as their heavy armament weapon, at

least for the present, as the new battle-ships and armoured cruisers are all to be armed with it. It throws a projectile of 760 lbs., as against the 850-lb. projectile of our latest pattern 12-inch gun; but as a set-off to this slight inferiority in weight of projectile, the gun gives an initial velocity of 3,202 foot-seconds, as against the 2,900 foot-seconds velocity of the 12-inch gun, so that the German gun is probably every bit as effective a weapon as the 12-inch mounted in our ships. Moreover, it has the advantage of being considerably lighter in weight, and thus needing less heavy mountings, a saving in weight which must prove of considerable value, as it will admit of a larger number of guns being mounted on the same displacement than our ships can carry.

Organisation of the German Fleet for 1908.—The High Sea Fleet, under the command of Admiral H.R.H. Prince Henry of Prussia, who flies his flag in the first-class battle-ship *Deutschland*, is organised at present as follows:—

1st Squadron (Vice-Admiral von Holtzendorf commanding).

1st Division:—

First-class battle-ships—*Wittelsbach* (flag-ship of Vice-Admiral), *Zähringen*, *Mecklenburg*, *Wettin*.

2nd Division:—

First-class battle-ships—*Kaiser Wilhelm II.* (flag-ship of Rear-Admiral Jakobsen), *Kaiser Wilhelm der Grosse*, *Kaiser Karl der Grosse*, *Kaiser Barbarossa*.

Scouting Division:—

First-class armoured cruisers—*Scharnhorst* (flag-ship of Rear-Admiral von Heeringen), *Friedrich Karl*.

Protected cruisers—*Hamburg*, *Danzig*, *Königsberg*.

2nd Squadron (Vice-Admiral Schröder commanding).

1st Division:—

First-class battle-ships—*Deutschland* (flag-ship of Commander-in-Chief), *Preussen* (flag-ship of Vice-Admiral), *Branschweig*, *Hessen*.

2nd Division:—

First-class battle-ships—*Pommern* (flag-ship of Rear-Admiral Paschen), *Elsass*, *Lothringen*, *Hannover*.

Scouting Division:—

First-class armoured cruisers—*Roon* (flag-ship of Rear-Admiral Kalau von Hofe), *Yorck*.

Protected cruisers—*Berlin*, *Lübeck*, *Frauenlob*.

The Destroyer Flotillas, each of which consists of 12 destroyers, are not permanently attached to the squadrons.

The First Manœuvre Flotilla has its headquarters at Kiel, and the Second Manœuvre Flotilla at Wilhelmshaven.

In addition there is a Third Instructional Flotilla and a Fourth Reserve Flotilla.

FOREIGN STATIONS.

Germany. *China and Far East.*—Cruiser Squadron under command of Rear-Admiral Coerper.

First-class armoured cruiser—*Fürst Bismarck* (flag-ship).

Protected cruisers—*Leipsic*, *Niobe*, *Arcona*.

Destroyers—*S90*, *Taku*.

First-class gun-boats—*Iltis*, *Jaguar*, *Tiger*, *Luchs*.

River gun-boats—*Tsingtau*, *Vaterland*, *Vorwärts*.

American Coast.—Protected cruiser—*Bremen*.

First-class gun-boat—*Panther*.

West African Station.—Small cruiser—*Sperber*.

East African Station.—Small cruisers—*Seeadler* and *Bussard*.

Australian Station.—Small cruiser—*Condor*.

Stationnaire at Constantinople.—Despatch-vessel—*Loreley*.

RESERVE DIVISIONS.

Wilhelmshaven.—Second-class battle-ships—*Kurfürst Friedrich Wilhelm* (fully manned), *Brandenburg*, *Weissenburg*, *Wörth* (all with special reduced complements).

Danzig.—Coast-defence battle-ships—*Friethjof*, *Ægir* (fully manned), *Siegfried*, *Beowulf*, *Hildebrand*, *Heimdall*, *Hagen*, *Odin* (all with special reduced complements).

Training Department of the Navy (Inspector, Vice-Admiral Borcken-hagen).

Sea-going training-ships for cadets and seamen :—

First-class protected cruiser *Freya*, three frigates, *Moltke*, *Charlotte*, *Stein*, which are shortly to be replaced by the three protected cruisers *Hansa*, *Hertha*, and *Victoria-Luise*, all three sister-ships of the *Freya*.

Included in this department are also the Naval Academy at Kiel, the School for Warrant Officers at Wilhelmshaven, and the Training School for Boys at Friedrichsort.

Torpedo Inspection (Admiral commanding, Vice-Admiral Zeye).

Torpedo training-ship—*Württemberg*.

Tenders—Destroyers *Carmen* and *Alice Roosevelt*, and three torpedo-boats.

At service of Experimental Committee :—

Protected cruisers—*Vineta* and *München*, and two torpedo-boats.

There are also two divisions of torpedo-men, the 1st Division being stationed at Kiel, the 2nd Division at Wilhelmshaven, while the torpedo factory is at Friedrichsort.

Naval Artillery Inspection (Sonderburg).—Inspector, Rear-
Germany. Admiral Schröder.

Sea-going training-ships:—

First-class battle-ship—*Schwaben*.

Protected cruisers—*Undine* and *Nymphe*.

Pontoon-ship—*Mars*, with two tenders, *Ulan* and *Delphin*.

At service of Experimental Committee:—

First-class armoured cruiser—*Prinz Adalbert*.

Pontoon-ship—*Fuchs*.

The Naval Gunnery School is now established permanently at Sonderburg.

Coast Artillery and Mines Inspection (Cuxhaven).—Inspector, Rear-
Admiral Franz.

Mine-laying vessels—*Nautilus*, *Pelikan*.

Pontoon-ship—*Rhein*, with one tender, *Otter*.

Two divisions of torpedo-boats (24 boats) for creeping for mines.

The 1st Division of seamen gunners is stationed at Friedrichsort, the 2nd at Wilhelmshaven, the third at Lehe, and the mining companies at Cuxhaven.

The Marine Infantry Inspection.—Inspector, Colonel Wyneken.

First Sea Battalion—Kiel.

Second Sea Battalion—Wilhelmshaven.

Third Sea Battalion—Tsingtau.

The Formation of Sand Banks in the Jahde.—An observation station has been established at Wilhelmshaven in order to study the influences of the currents and wind on the formation of the sand banks at the entrance to the river. It is hoped to be able to draw some definite conclusions by which it may be able to check the perpetual shifting of the banks in question. Not only do the continual shifting necessitate new soundings and new surveys being made every six months, but last summer during the grand manœuvres, the *Deutschland* was unable to enter the river, the level of water having fallen to an abnormal degree owing to a long continuation of easterly winds.

The Development of Danzig Dockyard.—The work of developing the dockyard is being carried on unceasingly with the view of meeting the demands of the growing fleet. At Danzig are now stationed, besides the 8 coast-defence battle-ships of the *Siegfried* class, a number of old cruisers and obsolete ships, making a total of 30 units of all kinds. Two second-class cruisers are under construction there, the *Stuttgart* and the *Ersatz Pfeil*, while the large cruiser *Hansa* is also undergoing repairs there.

A number of new buildings have therefore had to be constructed recently, which includes new magazines, a new power station, a large distilling water establishment, a new brass and copper foundry, more extended accommodation for the men employed in the yard, a new slip for

Germany. hauling up small vessels on for repairs, a new machine shop, a floating 150-ton crane, a floating dock for torpedo-boats, and other works. All these new works, which are being carried out in what is only a second-class dockyard, give some idea as to the activity that is being everywhere displayed in furthering the ever-increasing needs of the Navy.

In this connection it may be noticed that as the result of the embarkation and disembarkation manœuvres of last year, the authorities of the town of Apenrade have asked for the creation of a war port and a naval station, offering to pay part of the expense of turning the place into a naval base. The idea has already been adopted in high places, and it is reported that the new port will be called "Prinz Heinrich Haven."

Per contra, the inhabitants of Cuxhaven are complaining strongly of the numerous and rigorous restrictions imposed by the authorities in the neighbourhood of the forts and of the way in which a large part of the accommodation of the harbour is now taken up by the naval authorities for the mooring of mine-laying and mine-destroying vessels to the detriment of the mercantile interest of the port.—*Neue Preussische Kreuz Zeitung, Marine Rundschau, and Revue Maritime.*

Russia. *New Fleet Organisation.*—An Imperial Decree directs that the fleet shall for the future be classified as follows: 1, battle-ships; 2, armoured cruisers; 3, cruisers; 4, high-sea torpedo-boats (Eskadrennyje Minonoszy); 5, torpedo-boats; 6, small torpedo-boats; 7, mine-laying ships; 8, submarines; 9, gun-boats; 10, river gun-boats; 11, transports; 12, despatch-vessels; 13, yachts; 14, training-ships; 15, harbour-ships. It is to be noted that the three small armoured cruisers of the *Bayan* type, of 7,800 tons displacement, are classed as cruisers only, not among the "armoured" ones. In this classification the Russian Admiralty are following the example of the United States, where the three partially armoured cruisers of the *St. Louis* class are counted only as protected cruisers.

The high-sea torpedo-boats include:—All torpedo-vessels of 300 tons and upwards, which have names, and in addition fifty-one numbered torpedo-boats (102 to 104, 106 to 142, 212 to 220, 222 and 223) attached to the Baltic Fleet, twenty-three numbered boats (251 to 273) attached to the Black Sea Fleet, and eight numbered boats (201 to 203, 205, 206, 209 to 211) attached to the Siberian Squadron, while the torpedo-boats *Pron-sitelnij* and *Pylki* are attached to the Caspian Flotilla.

Among the small torpedo-boats are included the ten Nixon-boats, fitted with gasoline engines (Nos. 1 to 10), 57 old boats (Nos. 1 to 73), and 3 numbered boats (94, 97, 98) attached to the Siberian Fleet.

The Submarines are distributed as follows: 1, Baltic Fleet, 15—the *Okun*, *Makrel*, *Sterljad*, *Bjäluga*, *Peskar*, *Ssig*, *Kaiman*, *Karys*, *Kambala*, *Karas*, *Krokodil*, *Alligator*, *Drakon*, *Akula*, *Minoga*, of which the last five are not yet ready for service; 2, the Black Sea Fleet, 1—the *Losos*; 3, the Siberian Squadron, 14—the *Delfin*, *Kassatka*, *Scheremetjew*, *Skat*,

Russia. *Nalim, Ssom, Schtchuka, Ossjotr, Kesal, Bytschok, Plotwa, Palters, Forel, Keta.*

Among the despatch-vessels are now included the old destroyers *Lieutenant Iljin, Wojewoda, Possadnik*, and *Abejok*.

By an Imperial Decree of the 1st October last the fleet is to be organised as follows: It is to consist of the Active and Reserve Fleets (1 and 2 Reserve).

a. *The Active Fleet.*—This fleet will comprise all battle-ships and armoured cruisers not more than ten years old from the date of their completion, and cruisers and torpedo-vessels, so long as they are thoroughly efficient. The Active Fleet is to be always ready for service, but for two months in each year every ship will be in the dockyard hands for repairs and for the relief of the time-expired men of her crew. The petty-officer personnel will always be completed from among the trained men of the Reserve Fleet.

b. *The First Reserve Fleet.*—To the First Reserve will belong the battle-ships and armoured cruisers during their second decade from the date of their completion, as well as the cruisers and torpedo-vessels which are not quite up to the requirements of the Active Fleet. The First Reserve must be ready for sea and battle 48 hours after orders are received; the ships must have all their stores and two-thirds of the crew—specialists and non-specialists—on board. Among the officers must be the captain, his second-in-command, the chief engineer, the chief accountant officer, and all specialist officers with half of the non-specialists. These ships are fully commissioned for a certain time each year, and for the rest of the time are held in what is known as the "Armed Reserve." Boys and young seamen can be drafted to these ships for training.

c. *The Second Reserve.*—To this reserve belong all the older ships. They will have on board the commandant and at least one-third of the establishment of officers and one-third of her crew. Boys and young seamen can also be trained in these ships.

d. *Organisation of Squadrons.*—1. The Active and First Reserve Fleets are divided into squadrons, divisions, and brigades, corresponding to divisions and brigades in the Army. A complete squadron consists of 1 division of 8 battle-ships (2 brigades of 4 ships each), 1 brigade of 4 armoured cruisers, 1 division of 8 (2 brigades of 4 ships each) cruisers, 1 division of 36 high-sea torpedo-boats (2 brigades of 2 groups of 9 boats each, with a cruiser as division leader). A squadron never consists of less than 1 brigade of battle-ships, cruisers, and high-sea torpedo-boats. Smaller groupings are called sections.

2. The ships of the 2nd Reserve are grouped according to circumstances in special sections or as training sections.

3. Ships that are paid off or undergoing thorough repair are transferred to the dockyard authorities; during the annual and occasional small refits they remain attached to their squadrons.

New Submarines.—The new submarines *Karp, Kambala, and Karas*, which have been constructed at the Germania Yard, Kiel, have been taken

Russia. over by the naval authorities. They made the run from Kiel to Libau, a distance of 425 sea-miles, in 51 hours, averaging a speed of 8.3 knots. These vessels have a displacement, unsubmerged, of 200 tons, when submerged, of 240 tons; length 130 feet, beam, 9 feet 10 inches; speed, on surface of water, 11 to 12 knots; submerged, 9 to 10 knots; radius of action at 8 knots speed on the surface, 1,800 miles; submerged, 27 sea-miles, and with 7 knots speed, 40 sea-miles. They have one torpedo-discharge, and carry three torpedoes.

Reorganisation of the Dockyards.—The Government have decided on introducing a reform into the Baltic dockyards which has not been tried in any other country, and as to the results of which it is impossible to pronounce in advance.

These State establishments are to be rendered autonomous; no special credit has been provided for them in the Budget, and they will have to work on their own receipts. These will not be other than the sums due by the State for the construction and repair of ships.

These establishments will be able to do private work, so long as the Government work does not suffer.

The establishments are the following:—

Ship-building.

The Baltic Yard.—Construction of the hulls and engines of ships.

The New Admiralty Yard.—Construction and repairs of ships.

Oubokoff Works.—Manufacture of machinery, guns, carriages, projectiles, and armour plates.

Liorsk Works.—Manufacture of armour plates and matériel generally.

Losses During the War and Present Tonnage of Fleet.—It is estimated that during the war the loss to the Russian fleet was 56 ships, with a displacement of 249,000 tons. Of non-fighting ships, 21,000 tons were destroyed, not including harbour auxiliaries. This loss was replaced by the beginning of 1908 by ships equipped or in process of equipment, having a joint tonnage of 145,000, and numbering 159 pennants. The torpedo fleet was increased to 109 vessels, comprising 69 destroyers and torpedo-boats, 10 torpedo-boats with gasoline motors, and 30 submarines, with a total displacement of 35,650 tons. The fleet has besides some 46 ships of various descriptions, including gun-boats, mine-laying ships, and vessels of other types, with a displacement of 144,000 tons. The displacement of the battle-ships amounts to 161,000 tons; of cruisers to 126,000 tons; of the torpedo units to 54,000 tons; the whole fleet requiring to man it, 57,000 men of all ranks, reduced by the Ministry to 47,000.

An order has been placed with the Baltic Shipbuilding Yard by the Ministry of Marine for the construction of a battle-ship of 22,300 tons, and the plans have been drafted.—*Kronstädtski Vidstnik* and *Revue Maritime*.

United States. *The Fastest Ship in the American Navy.*—The *Chester*, the first of the three scout cruisers which were authorised in 1904, has recently completed a series of very successful official trials, and by steaming for four hours at an average speed of 26·52 knots she has established her position as the fastest ship in the American Navy. This performance is particularly creditable to her builders, the Bath Iron Works, Bath, Me., and it constitutes another triumph for the Parsons marine turbine, with which this ship is driven. The results are far in excess of the contract, which called for only 24 knots an hour. The *Chester* is the first of an entirely new type, to which the Navy Department has given the title of "scout cruisers." She is designed purely for scouting, and her lines were drawn and her general proportions outlined with a view to producing a ship of large coal capacity and capable of maintaining a high average speed in rough weather. She has a lofty forecastle deck with a freeboard on normal displacement of about 30 feet. The freeboard amidship is about 20 feet, and 21 feet aft.

The general particulars are as follows:—Length between perpendiculars, 420 feet; length over all, 423 feet; breadth on load water-line, 47 feet 1 inch; mean draught, 16 feet 9 inches; displacement at that draught, 3,750 tons, which was her displacement on trial. The maximum bunker capacity is 1,250 tons, and with this amount of coal and full ammunition supplies her displacement is 4,687 tons. She was designed to give 24 knots an hour with 16,000-H.P. She carries two inches of nickel steel at the water-line, and some measure of protection is afforded by a water-tight deck. The armament consists of two 5-inch Q.F. guns, one forward and one aft, and six 3-inch Q.F. guns, these guns being mounted mainly for protection against torpedo-boat attack. She carries two of the new 21-inch turbine-driven torpedo-tubes, submerged below the water-line.

Special interest attaches to the three ships of this class, because of the differences in their motive power. The *Chester*, built at the Bath Iron Works, is driven by Parsons marine turbines; the *Salem*, built by the Fore River Shipbuilding Company, Quincy, Mass., is propelled by marine turbines of the Curtis type; and the *Birmingham*, also built at Fore River, is propelled by twin-screw vertical triple-expansion engines. This will afford an opportunity for an absolutely fair comparative test of three types of engines. The Curtis and the Parsons turbines will be able to settle the question of superiority under exactly identical conditions, and the well-tried, multiple-expansion, reciprocating engine will have an opportunity to surpass both types in the speed achieved and in the economy of coal consumption. As matters now stand, the Parsons turbine has certainly set the figures of speed and economy at a very high mark.

The details of coal consumption, air and steam pressure, etc., as given in the accompanying data of the four-hour trial at maximum speed, the twenty-four-hour trial at 12 knots, and the twenty-four-hour trial at 22½ knots show how excellent was the performance of this ship. The excess of over 2½ knots speed above that required by contract is even better than it looks, for while 250 pounds steam pressure was allowed at the

United States. steam chest, only 240 pounds was used, and the air pressure was only 3 pounds instead of the contract pressure of 5 pounds. Furthermore, on the twenty-four-hour trial at 22½ knots an hour the speed was 22·78 knots an hour, and whereas the contract required that at this speed the vessel should cover

Details of Official Trials of the Scout Cruiser "Chester."

	Contract.	Trial.
<i>4-Hour trial.</i>		
Average speed per hour for 4 hours	24 knots.	26·52 knots.
Maximum speed for 15 minutes	—	26·6 "
Distance covered in 4 hours	96 knots	106·08 "
Steam pressure allowed at steam chest	250 lbs.	240 lbs.
Air pressure allowed	5 "	3 "
<i>24-Hour trial at 12 knots.</i>		
Speed	12 knots.	12·2 knots.
Coal, approximate	—	43 tons.
<i>24-Hour trial at 22½ knots.</i>		
Speed average for 24 hours	22½ knots.	22·78 knots.
Speed maximum for 1 hour	—	22·9 "
Distance covered in 24 hours	540 knots,	546·72 "
Coal consumption in knots	{ 1·75 per ton.	2·84 knots per ton.

1·75 knots per ton of coal burned, she actually covered 2·84 knots per ton. Another significant fact is that during the twenty-four-hour trial the evaporating and distilling plant of the vessel was run at its normal capacity, it being necessary to run the plant continuously at a rate which would evaporate and distil 10,000 gallons of fresh water in twenty-four hours. The steam heat, the ventilation system, including all electric blowers, the forced-draught blowers, the sanitary system, the steam-to-steam tables and for stewards' use, the steering engine and ice machine, were all in continuous operation during the twenty-four hours. Also the electric light plant was run continuously to furnish light for all parts of the ship. Hence the covering of 2·84 knots per ton of coal burned was, under the conditions, an extremely creditable performance.—*Scientific American.*

MILITARY NOTES.

Home. The following are the principal appointments which have been made:—

Generals—The Rt. Hon. F. W. Lord Grenfell, G.C.B., G.C.M.G., Colonel 1st Life Guards, Colonel Commandant The King's Royal Rifle Corps, General Officer Commanding-in-Chief the Forces in Ireland to be Field-Marshal. Sir W. G. Nicholson, K.C.B., from Q.M.G. to the Forces (Third Military Member of the Army Council) to be Chief of the General

Home. Staff (First Military Member of the Army Council). P. S. Lord Methuen, G.C.B., K.C.V.O., C.M.G., to be General Officer Commanding-in-Chief, South Africa.

Lieut.-Generals—Sir A. H. Paget, K.C.B., K.C.V.O., to be General Officer Commanding-in-Chief the Eastern Command. R. S. S. Baden-Powell, C.B., to command a Division. Sir R. Mac G. Stewart, K.C.B., Lieutenant of the Tower of London, to be General.

Major-Generals—H. S. G. Miles, C.V.O., C.B., from Director of Recruiting and Organisation, to be Q.M.G. to the Forces (Third Military Member of the Army Council). T. Dickson, from Charge of Administration, Eastern Command, to command a Division. F. A. Bowles to be a Commander of Coast Defences. Sir H. H. Settle, K.C.B., D.S.O., Commanding Portsmouth Coast Defences, to be Lieut.-General.

Colonels—C. Crutchley, M.V.O., from an A.A.G., to be Director of Recruiting at Headquarters, and is granted the temporary rank of Brigadier-General. B. J. C. Doran, C.B., to be an A.A.G. C. G. Jeans, Ordnance Officer, First Class, to be Principal Ordnance Officer, and is granted the hon. rank of Major-General. V. J. Dawson, C.V.O., Commanding 15th Infantry Brigade, to be Major-General. J. B. Forster, Commanding No. 12 District, to be Major-General. F. A. Bowles, Inspector of Coast Defences and Garrison Artillery in India, to be Major-General. D. Henderson, D.S.O., Staff Officer to the Inspector-General to the Forces, is granted the temporary rank of Brigadier-General.

The undermentioned Colonels commanding grouped Regimental Districts, to command Divisions, and to retain the temporary rank of Brigadier-General while so employed: A. W. Hill, C.B.; W. J. Kirkpatrick, C.B.; F. Macbean, C.V.O., C.B., A.D.C.; C. G. Donald, C.B.; A. J. A. Wright, C.B.; J. H. Campbell; H. R. Kelham, C.B.; W. L. Fry, C.B.; H. J. Archdale, C.B.; H. A. Railt, C.B.

The undermentioned officers to command Mounted Brigades: J. M. Babington, C.B., C.M.G. (temporary Major-General); J. F. Burn-Murdoch, C.B., h.p.; L. Rolleston, D.S.O., from the Nottinghamshire (South Nottinghamshire Hussars) Yeomanry; F. C. Meyrick, C.B., from the Pembroke (Castlemartin) Yeomanry; Simon J. Lord Lovat, C.V.O., C.B., D.S.O., from Lovat's Scouts Yeomanry.

The undermentioned officers to command Artillery: P. H. Hammond, retired pay, from commanding the Humber Volunteer Infantry Brigade; F. L. Cunliffe, retired pay; W. G. Massy, retired pay.

G. F. Ellison, C.B., from Principal Private Secretary to the Secretary of State for War, to be Director of Organisation at Headquarters, and to be granted the temporary rank of Brigadier-General. J. H. Cowan, from h.p., to be an Assistant Director of Fortifications and Works at Headquarters. E. B. Urmston, C.B., from h.p., to command a District. G. G. Aston, C.B., R.M.A., to be a Brigadier-General, General Staff. Sir J. R. L. Macdonald, K.C.I.E., C.B., Commanding Lucknow Infantry Brigade, to be Major-General.

Home. *Annual Report of Recruiting for the Year ended 30th September, 1907.*—The Report is divided into four parts.—

1. General Observations on Recruiting for the past year.
2. Army Reserve.
3. Militia and Imperial Yeomanry.
4. Civil Employment of Discharged Soldiers and Reservists.

1.—*General Observations on Recruiting.*

The number of recruits who joined the Regular Army, excluding re-enlisted men and those for Colonial Corps, for the twelve months under review amounted to 34,916, and for Militia to 28,575. The total for the Regular Army shows a decrease of 1,494, as compared with the previous twelve months, while that for Militia shows a falling off of 157.

The decrease for the Regular Army may be attributed to the fact that cavalry recruiting was largely restricted throughout the year, that few artillery drivers were required, and that recruiting for the regiments, battalions of which had been disbanded, was entirely closed for the greater part of the year.

Owing to the reductions in establishment, special steps had to be taken to allow men to pass prematurely to the Reserve, and to prevent extensions and re-engagements and the continuance in the Service of those non-commissioned officers and men who had completed 21 years' service for pension. As the reductions became effective, these special measures were gradually withdrawn and the normal conditions of service in the several arms restored. A considerable number of old soldiers were by these means forced to take their discharge who would probably have remained serving for several years. Such compulsory discharges to pension in consequence of reductions have, of course, a material effect on the Pension Vote, and at the same time force a considerable number of elderly men to seek employment in the labour market.

In order to reduce the surplus of men in regiments, of which battalions were disbanded, bounties were offered to men in the battalions concerned to transfer to other units. The number, however, who accepted transfer was small.

Bounties have been offered to men on various occasions to extend their service at different stations abroad. As the abolition of enlistments for three years in the infantry of the line and other arms reduced the numbers of men passing to the Reserve, instructions were issued cancelling all offers of bounties which remained open.

The experiment referred to in my last year's Report of sending recruits to local dentists for treatment proved so satisfactory that it was decided to extend the system, and funds were specially provided for the purpose. The arrangements made are working satisfactorily, with the result that a considerable percentage of recruits, who would otherwise have been lost to the Service, have been enabled to enlist.

An important change was made in the pay of the soldier by the introduction of proficiency instead of Service pay. The broad conditions under which proficiency pay is issued are that soldiers to draw the pay must be in possession of a third-class school certificate and fulfil stated

Home requirements of efficiency. Soldiers thus no longer draw a higher rate of pay from mere length of service. The system introduced required certain adjustments to be made in the pay of other corps receiving special rates of pay. This change should undoubtedly lead to a higher standard of proficiency of soldiers in their duties.

The following table shows the total number of recruits joined (exclusive of re-enlisted men, and those for Colonial Corps), the numbers taken under any of the standards, and the percentage under standard, during the twelve months ended 30th September, 1907, as compared with the previous four years:—

	First 9 months of 1903.	Year ended 30.9.04.	Year ended 30.9.05.	Year ended 30.9.06.	Year ended 30.9.07.
Total Recruits joined ...	28,183	41,279	35,351	36,410	34,916
Number under any of the standards	1,722	531	220	460	696
Percentage under standard	6.1	1.2	0.60	1.26	1.99

It will be noticed that there is a slight increase in the percentage of the recruits enlisted under standard; but it must be borne in mind that the standards for several corps have been materially raised. It does not, therefore, follow that the recruits were under the normal standard of the corps.

The number of Militiamen who joined the Regular Forces during the past year is given below. It must be borne in mind that a considerable number of these are shown in the Militia Returns as recruits for the Militia.

Corps which the men joined.	First 9 months of 1903.	12 months ended 30.9.04.	12 months ended 30.9.05.	12 months ended 30.9.06.	12 months ended 30.9.07.
Regular Army ...	11,870	14,982	12,103	12,409	12,113
Royal Navy or Royal Marines ...	559	716	330	603	646
Total ...	12,429	15,648	12,433	13,012	12,759

The number of recruits raised by the Permanent Staff of the Militia, Volunteers, and Imperial Yeomanry respectively for the year ended 30th September, 1907, is as follows:—

	For Regulars.	For Militia.
Number of Recruits raised by Permanent Staff of Militia, for year ended 30.9.07 ...	11,752	15,034
By Sergeant Instructors of Volunteers, for year ended 30.9.07 ...	3,168	2,332
By Permanent Staff of Imperial Yeomanry, for year ended 30.9.07 ...	62	38

2.—*Army Reserve.*

The strength of the Army Reserve has increased very largely during the past twelve months. This result is attributable to the large number of men enlisted for three years who have passed to the Reserve, and also in a lesser degree to the increased number of men who have been allowed to pass prematurely to the Reserve.

Enlistment into Section D of the Army Reserve, which was suspended on the 1st July, 1906, was reopened on the 1st July, 1907. On the other hand, the men belonging to the Special Submarine Mining Section, Army Reserve, Royal Engineers, were discharged from the Army Reserve with effect from the 31st July, 1907, in consequence of the change of policy by which the Admiralty have taken over this system of defence.

Arrangements have been made by which Reservists residing abroad may enlist or re-engage under certain conditions in any part of His Majesty's dominions outside the United Kingdom or in any British Protectorate. In any Colony possessing responsible Government, enlistments are not permissible, but only re-engagements under the Regulations for the Army Reserve.

The strength of the Army Reserve and the numbers belonging to the various arms of the Service and to each section of the Reserve are shown in the Tables A and B:—

A	Date.	Arms of the Service.												Total strength.
		Household Cav. Cavalry.	Royal Artillery.	Royal Engineers.	Foot Guards.	Infantry of the Line.	Army Service Corps.	Royal Medical Corps.	Army Ordnance Corps.	Army Veterinary Corps.	Army Post Office Corps.	Army Pay Corps.	Colonial Corps.	
1st Jan., 1903	...	2,028	4,881	1,559	3,904	18,656	1,278	828	55	...	43	8	125	32,865
1st Oct., 1903	...	5,599	7,841	2,657	5,790	40,403	2,188	1,095	130	...	198	17	253	66,471
" 1904	17	5,773	8,895	2,996	6,281	45,885	3,093	1,280	127	...	237	17	339	74,940
" 1905	40	7,298	11,881	3,591	6,874	59,269	3,471	1,441	215	...	242	20	128	94,770
" 1906	51	7,464	15,192	4,052	7,488	69,924	3,998	1,589	272	...	130	1	436	110,596
" 1907	89	7,858	17,902	4,413	7,943	80,089	4,243	1,940	314	5	130	...	444	125,370

¹ Omitted.

B	Date.	Numbers provided for in Army Estimates as probable maximum.	Volunteers.	Sections of the Army Reserve.					Total Strength.
				Section A.	Section B.	Section C.	Section D.		
1st Jan., 1903	...	70,000	...	328	28,759	697	3,081	...	32,865
1st Oct., 1903	...	70,000	...	2,921	55,165	1,741	6,644	...	66,471
" 1904	..	80,000	...	2,564	62,190	...	10,186	...	74,940
" 1905	..	104,000	...	4,133	75,257	...	15,380	...	94,770
" 1906	..	122,000	...	3,677	87,943	...	18,976	...	110,596
" 1907	..	129,000	...	4,197	101,718	...	16,455	...	125,370

¹ Section C has been merged into Section B.

3.—*Militia and Imperial Yeomanry.*

The strength of the Militia has decreased during the past year from 83,720 to 82,331, while the number of recruits shows a small decrease of 157. It cannot be considered surprising that the force should have decreased during the year when the uncertainty as to its future is taken into account.

The experiment of a system of extended training which was made in the case of the 20 battalions mentioned in my last report produced satisfactory results, though the wastage among the recruits enlisted in certain battalions was decidedly heavy.

An analysis was made with a view of ascertaining if recruiting for the Regular Army suffered by the extended period of recruits training in these battalions, and also from the fact that recruits were prohibited from entering the Regular Army until they had completed one annual training. The analysis showed that while a reduced number of recruits joined the Regular Army from these 20 battalions, the deficiency was almost entirely counteracted by the increased numbers obtained from other Militia battalions which may be regarded as locally alternative battalions to the 20 selected. The reports on the Recruits' Drill and Training of these 20 battalions were favourable, the recruits being stated to have reached a marked degree of efficiency, and to have improved both physically and mentally during their six months' drill.

The whole of the Royal Engineers Submarine Mining units have been disbanded during the past year.

Re-engagements for the Reserve Division of the Militia have been stopped, except in the case of men of the Royal Garrison Regiment, who had a vested right to continue serving.

The aggregate strength of the Militia by arms and distribution is as follows:—

Serving on the	Arms.								
	Eng.	Scot.	Irish.	Total.	Roy. Artillery.	Roy. Engineers	Infantry.	Royal Army Medical Corps.	Total.
1st Oct., 1904	59,287	10,048	17,156	86,491	13,352	2,020	70,421	698	86,491
" 1905	57,601	10,238	17,975	85,814	13,254	2,154	69,629	777	85,814
" 1906	54,914	10,239	18,667	83,720	12,659	2,063	68,001	997	83,720
" 1907	53,153	10,624	18,554	82,331	11,851	1,662	67,741	1,077	82,331

Imperial Yeomanry.

Recruiting for the Imperial Yeomanry may be considered as satisfactory during the past year, and the force as a whole has slightly increased in strength.

The Imperial Yeomanry on the 1st October, 1907, was 1,833 under establishment, thus showing a slight gain during the current year. The number of recruits joined amounted to 5,302, as compared with 5,952 for the preceding twelve months.

The subjoined table shows the increase and decrease in the Imperial Yeomanry during the year ended 30th September, 1907 :—

Strength on 1st October, 1906	...	23,736	Totals.
INCREASE—			
Recruits joined	...	5,302	
Re-enlisted	...	118	
Joined from desertion	...	11	
Other causes	...	2	
Total increase	...	5,433	
DECREASE—			
Died	...	60	
On termination of engagement	...	4,095	
As invalids	...	69	
Recruits rejected after attestation	...		
Discharged	Mis-statement as to age	1	
	By purchase	632	
	On conviction of felony	3	
	For misconduct other than felony	9	
	Other causes	35	
Deserters struck off	...	268	
Joined	Regular Army	61	
	Royal Navy or Royal Marines	10	
Other causes	...	7	
Total decrease	...	5,250	
Net increase	...	183	
Strength on 1st October, 1907	...	23,919	

4.—Civil Employment.

The revised pamphlet on Civil Employment referred to in last year's Report, which was held back owing to the appointment of the Committee of which Sir Edward Ward was chairman, was issued during the period now under review. A copy of this pamphlet is given to every ex-soldier whose character on discharge or transfer to the Reserve is not less than "Good."

The question of the provision of civil employment for soldiers is in rather an unsettled state, owing to recent legislation which imposes the duty in future of providing civil employment upon the County Associations. No steps have been taken up to the present to hand over this work to County Associations, as it is desirable that the latter should get into

Home. thorough working order before embarking upon so important a portion of their duties. Civil employment is therefore being carried out as in the past by the agencies which have already been in existence for some time.

The Army Council have had under consideration the advisability of more fully advising large employers of labour of the numbers and qualifications of soldiers about to be discharged, and it is hoped that, when the system has been got into thorough working order, employers may be induced to apply more readily to the several employment agencies to obtain the labour required.

The steps which have been taken to give serving soldiers technical instruction in certain trades should lead to beneficial results. If serving soldiers would avail themselves of the facilities given them to fit themselves for employment they would find it far easier to get work on their return to civil life.

As regards the general question of the provision of employment of ex-soldiers, it has been brought to notice on more than one occasion that the Unemployed Workmen's Act of 1905 acts detrimentally in the case of soldiers sent home from abroad after a lengthened period of service for discharge or transfer to the Reserve. Such soldiers cannot possibly have the residential qualification to enable them to obtain any benefits under the Act, and thus men who have been serving their country abroad, and perhaps in an unhealthy climate, are at a disadvantage.

The Treasury have conceded to soldiers while still serving the permission to compete in Civil Service examinations. Copies of the rules and regulations relating to such examination have been promulgated and supplied to Army Schools, and facilities will be afforded to soldiers to study the subjects required for these examinations in Army Schools.

Arrangements have been made that in future pensioners or Army Reservists who accept Post Office work will receive their pensions or Army Reserve pay weekly in arrear, together with their Post Office wages.

General Remarks as to Civil Employment.

The following table records the number who left the Colours with characters entitling them to registration for civil employment. The actual number for whom employment was found by means of Official Registers, Employment Societies, and Departments under the War Office, is shown below. It will be seen that, while 31,044 men have returned to civil life from the Army with characters either Good, Very Good, or Exemplary, no less than 24,179 ex-soldiers have either been provided with employment or have found situations.

Number discharged or transferred to the Reserve with	“Exemplary” characters	...	3,549
	“Very good” characters	...	15,684
	“Good” characters	...	11,811
Total	31,044

Home.	War Office Register (Messengers, etc.)	59
	Regimental and Recruiting Registers (affiliated) to National Association	5,799
	National Association (London Office only) ...	1,728
	¹ National Association (Branches)	1,215
	Soldiers, and Sailors' Help Society (London Office only) ...	852
	Army and Navy Pensioners' Employment Society	752
	Guards' Employment Society ...	176
Number of Men for whom employment has been found.		
	Army Clothing Department ...	5
	Works and Fortifications Department ...	31
	Ordnance Factories	91
	Army Service Corps Services ...	473
	Army Ordnance Department ...	237
	Clerks in War Office ...	4
	Writers under Army Accounts Department ...	9
	Teachers, etc., in Army Schools ...	11
To these may be added	Men who are known to have themselves obtained employment ...	12,737
	General Total	24,179

¹ Temporary employment for 915 in addition to the above figures.

Concluding Remarks.

The total number of recruits taken in 1906-7 for the Regular Army, excluding Colonials and re-enlisted men, is 34,916 men. It may be interesting to give the figures for the past three years. They are as follows:—

	Regulars.		Militia.	
	Infantry.	All Arms.	Infantry.	All Arms.
1904-5...	22,170	35,351	24,562	29,941
1905-6...	20,774	36,410	24,201	28,732
1906-7...	24,063	34,916	25,107	28,575

These numbers are fairly constant, and the variations in them are chiefly due to administrative reasons, such as reductions in establishments, and the closing of arms of the Service, in connection with such reductions or changes in establishment.

The class of recruits is undoubtedly improving. The concensus of reports from the districts is to this effect. The pay, the additional comforts, and the prospects of the soldier are having a marked effect. There are many indications to prove this, but perhaps the most satisfactory is the decrease of wastage.

Recruiting, as has been remarked in previous Reports, should always be considered in connection with wastage. Expense is incurred and efficiency is diminished if men are taken who cannot fulfil their engagement.

Wastage, as affected by the class of recruit taken, may be comprised under the following heads:—Invaliding, men discharged within three

Home. months of their enlistment as not likely to make efficient soldiers, and men discharged for misconduct. The numbers are as follows:—

Cause.	1903-4.	1904-5.	1905-6.	1906-7.
Invalids	4,973	4,226	3,284	2,928
Not likely to become efficient	1,373	1,822	1,248	928
Misconduct	3,656	3,090	2,121	2,119
Total	10,002	9,138	6,603	5,975

From this it will be seen that there is a successive diminution in each year, and that in three years the reduction amounts to upwards of 4,000 men.

Attention was directed in last year's Report to the training of recruits at dépôts, and to the necessity of a careful selection of the dépôt staff for that purpose. The importance of this is now increased. Dépôts will in future be responsible for the training not only of the Regular recruit, but for the instruction of the Special Reservist. It will be borne in mind that the principle observed in regard to that force is a longer initial period of training on enlistment, viz., six months, and a shorter period of annual training. The dépôts will be charged with the instruction over this longer period, upon which much of the value of the Special Reservist will depend. It is essential, therefore, that the dépôt staff shall be selected with a view to produce the best results from the training period so allotted.

This training is not confined to military exercises. The recruit's education whilst at the dépôt should proceed side by side with his military instruction and his physical development. Steps, as shown later, have been taken to increase the value of the physical training, and the instruction given by the officer and the Army schoolmaster will improve the recruit, not only as a soldier, but as a citizen. The period during which a soldier actually serves with the Colours is short, and his instruction should be such that when he returns to civil life he may do so improved by his Army training, and in a position to obtain employment in a situation for which his Army training may have specially fitted him.

In this connection it may be mentioned that schoolmasters frequently introduce into their lessons examples which bring home to soldiers the fact that small sums saved daily throughout their service amount to a considerable total in a given number of years, and questions of this character are included in examinations for certificates. Teachers in Army Schools explain to the men the advantages of the Post Office Savings Bank, the general principles of life annuities, and other insurances, sick funds, etc.

Attention was drawn in last year's Report to the subject of physical training, which has been under constant consideration. Lieutenant H. P. Langkilde, of the Danish Army, was employed to assist in the revision

Home. of our system of physical training, and much value was derived from that officer's services. A committee, consisting of—

Surgeon-General Sir A. Keogh, K.C.B., M.D., K.H.P., Director-General, Army Medical Service,
 Sir Frederick Treves, Bart., G.C.V.O., C.B., F.R.C.S.,
 Professor J. S. Haldane,
 Dr. M. S. Pembrey,
 Surgeon-General Sir T. J. Gallwey, K.C.M.G., C.B., M.D.,
 Colonel S. P. Roit, Inspector of Gymnasia,
 Colonel G. G. A. Egerton, C.B., Commandant, School of Musketry,
 Lieut.-Colonel W. G. Macpherson, C.M.G., M.B.,
 Lieut.-Colonel A. M. Davies, Professor of Hygiene, Royal Army Medical College,
 Captain L. E. L. Parker, Secretary,
 Lieut.-Colonel C. H. Melville, M.B.,

was also assembled to advise and report upon the physiological effects of food, training, and clothing of the soldier.

The advantage gained by the consideration of these questions by this committee is very great, and physical exercises will in future be based not only on military requirements but on medical expert advice. Defects which undoubtedly existed in the old course will be corrected. For example, instructions have been issued that the pulse rate of recruits should be recorded on enlistment into the Army. By this means it is easy to prevent recruits being unduly distressed by physical or other exercises, as observations can be better maintained. The preliminary reports from dépôts and commands speak in the highest terms of the new arrangements.

These reports show that the new exercises tend to develop the intelligence of the men, and are more interesting in their nature, that they are capable of being performed without undue distress to them, and they will undoubtedly diminish admission to hospital for disordered action of the heart.

Recruiting for the past year may be considered to have been comparatively uneventful. The changes which must necessarily take place in the future in consequence of the legislation enacted by the Territorial and Reserve Forces Act, 1907, may affect recruiting materially. It may be found, for instance, that by the abolition of the Garrison Artillery Militia, Garrison Artillery recruits may be harder to obtain. It is possible that in some areas the formation of the Territorial Association may materially assist in popularising the Army and aid recruiting. On the other hand, large reductions have been made in the Permanent Staff of the present Auxiliary Forces, which will in themselves reduce the numbers of recruits throughout the United Kingdom. Experience only can show what changes and modifications will have to be made in future to meet the new conditions of affairs.

H. G. MILES, Major-General,

Director of Recruiting and Organisation.

Army Budget for 1908.—This Budget is made up as follows
Austria-Hungary. (a krone = 8*fl.*) :—

	Krone.
Ordinary expenditure	298,400,000
Extraordinary expenditure	13,400,000
Occupation credit	7,800,000

The increase in the pay of officers does not figure in the Budget, the consent of the Hungarian Government not having been obtained. The ordinary expenditure shows an increase of 7,300,000 krone over that for the previous year, but of this, 1,900,000 krone is due to the increased dearness of food and forage. The increase is thus practically only 5,400,000 krone, and the greater portion of this is destined for the field and mountain artillery and for the machine gun sub-divisions. In the field artillery this money will serve for the creation of two group commands in each of the sixteen regiments, for the change of the eight groups of two batteries of six guns each into groups of three batteries. Further, a portion of the sum available will be devoted to the formation of a supplementary effective, meant to complete up to war strength the regiment which is annually placed at the disposal of the Artillery School for Gunnery.

In the mountain artillery the creation of three regiments is provided for, of which two will have four and one will have three mountain batteries, plus two batteries of guns with decreased span between wheels; in addition, a new battery will be formed in Dalmatia for the requirements of Fort Cattaro, which, with the eleven batteries already existing in that district, will bring their number up to twelve.

In the position artillery of the field army, the present cadres will be increased so as to form five howitzer divisions of three batteries each; in two of these divisions the batteries will have four guns, and in the other three, only two. The Budget finally lays down the formation of five sub-divisions of two machine guns each for the infantry and one sub-division of four guns for the cavalry. The number of these sub-divisions will probably be so increased that every infantry and jaeger regiment and every cavalry division will have their machine-gun sub-division.

All these changes, of the first importance, absorb about 4*½* million krone. In the event of the Hungarian Parliament not agreeing to the increase of the recruit contingent necessary to carry them out, the War Department has decided to provisionally supplement that contingent by lowering the effective of every fourth battalion by 48 men, which will reduce the infantry effective by 4,824 men. A matter for further notice is the increase in the number of staff officers and of infantry captains, the decrease in the number of lieutenants, and the reduction in the effective of the infantry cadet schools. These latter with other administrative changes, will allow of a slight economy being realised on some portions of the Budget. The only important and new expenditure provided for in the extraordinary expenditure is the re-armament of several specially exposed fortified positions with new matériel.—*Revue Militaire Suisse.*

Austria-Hungary. *Mobile Field-Kitchens.*—An account recently appeared in *Danzer's Armee-Zeitung* of a lecture delivered before the Society of Military Science of Vienna on the trials of the mobile field-kitchens carried out at the last Austro-Hungarian manœuvres, of which the following is an extract: On the approach of the grand manœuvres, the Austrian War Minister invited the factories particularly interested in this subject to send types of kitchens constructed to prepare 250 rations at a time (160 for the cavalry), the weight of which should not exceed 500 kilogrammes (about half a ton) when empty, and 900 kilogrammes (about 17 cwt.) when they were loaded. Nine mobile kitchens were sent to be experimented with, but none of them fulfilled the conditions as regards the maximum weight which was fixed. Two of them were heated by steam and the others by the ordinary method. The former had the advantage of preparing the food very well, but was less practical than the other type, because its weight was too great and its construction too complicated. At the same time, the steam-heating field-kitchens appeared to be quite suitable for medical units.

The mobile kitchens were all drawn by two horses, and contained three large boilers, and two small ones for officers, as well as baking ovens and other accessories. The fact of having several boilers is practical, because it permits of the preparation of different foods at the same time. During the course of last year's manœuvres, however, no use whatever was made of this advantage. According to the opinion of the lecturer, the officers' boilers might be abolished, and a saving in weight of the carriage thus obtained, which weight should certainly not exceed 900 kilogrammes when loaded if it should be able to follow troops over all sorts of ground.

The metals employed in the construction of the boilers are: Copper, sheet-iron, and nickel. Copper is dangerous on account of the verdigris it forms; sheet-iron is far more preferable, but has some inconveniences, and particularly that it rusts easily. The best metal, but also the dearest, is nickel.

All the troops who used these mobile field-kitchens during the manœuvres were universally and frankly enthusiastic on their advantages, which proves that their adoption in the Army is an urgent necessity; but before deciding on a fixed pattern it is still necessary to carry out further experiments, for a month at least, under the most varying circumstances. The time during which these mobile field-kitchens were used last summer during the manœuvres was too short to enable a decisive opinion on the subject to be arrived at.

As regards the position of the kitchen wagons on the march, they immediately followed the infantry ammunition park of the division; but according to the lecturer's opinion they should be placed in the same column as the troops. It is only under these conditions that all their advantages will be fully apparent, for thus only can the troops receive their hot meals immediately on their arrival at a halting place. On

Austria-Hungary. the hypothesis that the tail of a column of an infantry division reached the halting place at 3 p.m., if the mobile field-kitchens march with the troops, the latter may receive their meal between 3.30 p.m. and 4.30 p.m. On the other hand, if these kitchens follow with ammunition park, the meal cannot be served to the men till between 6 p.m. and 8 p.m. Troops without kitchen wagons could not, under the same hypothesis, obtain their meal till after 10 p.m.

The lecturer proposed, consequently to withdraw, during ordinary marches, the company ammunition wagons of columns, and to substitute kitchen wagons in their place. When advancing on an enemy with a view to a fight, these wagons must of course remain in rear with the ammunition park.

New Infantry Drill Regulations.—The intention of the Commission appointed to revise the 1898 Regulations was to take into account the experiences of the latest wars, of the improvements effected in the execution of musketry and the conduct of fire, of the new army organisation, and of the reduction of service with the colours (20 months instead of 28 and 36). At the same time, it had no wish to make a clean sweep of the previous regulations, but merely to simplify and modify the existing regulations in order to place it in line with improvements effected in armament and tactics; it was desirous of maintaining and increasing the training of commanders of all ranks, and with that object has divided the regulations into two parts: the schools and battle-instruction. Finally, it wished to further exclude all which is not applicable to war or which is not indispensable for the preparation of troops for action.

The period devoted to the teaching of the soldiers', the groups', and the companies' schools has been reduced to 4½ months; in doing this there was no intention of reducing the period for the thorough training of the soldier but to increase the period for combined training of the regiment. This reduction of preliminary training is due to the simplifications introduced into the soldiers' school and to an improved use of the time devoted to the companies' school.

In the various schools many movements have been abolished or simplified. The regulations have introduced individual firing as the normal fire of the battle-field, and has laid down volley firing for certain special cases.

The preparation of the soldier for his duties as a combatant demands an increasingly thorough material instruction and moral education, which confers a growing importance and influence on the officer. The principle of successive training of units requires that a large part should be devoted to the group school (the basis of that of the company), in contradiction to what was laid down by the former regulations.

"Another significant and essential progress: the line of sections and the line of groups have become the fighting formations *par excellence* of all units."

Belgium. The advance of the skirmishers is laid down in accordance with modern ideas : no more hard and fast rules. The configuration of the ground and the circumstances of time and place alone determine the formations to be adopted and the course to be pursued. "Exercises in close order terminate, in principle, with the company school, but they still bulk largely in all the schools, and especially in those of the larger units ; the authorities do not appear to have been able to make up their minds to replace them by evolutions having a definite object, such as advancing against an enemy by simpler and more certain methods."

Battle-training is sub-divided into chapters dealing with generalities, the general principles of action of different units, and the particulars of fighting in woods, defiles, inhabited localities, entrenchments, etc.

The generalities deal with the general rôle of infantry in battle, fundamental formations, connections and unity of efforts, the conduct of fire, the utilisation of cover, and security.

The chapter on general principles examines the extension and distribution of a company in action, flank protection, the position and distribution of reserves. As regards more especially the offensive, it treats of the arrival in the probable fighting zone and advances on the enemy, the initial assembly, the march into zones beaten by artillery and infantry fire, the attack of *points d'appui*, the fire, the assault, the pursuit or the retreat.

As regards the defensive, it similarly examines the various points of action : reconnaissance, organisation, and occupation of the principal position, temporary position, defence of exterior posts and *points d'appui*, defence of intervals, fire, counter-attacks, counter-offensive, pursuit or retreat. Amongst the new prescriptions are to be found excellent dispositions inspired by the former regulations of 1898 and by similar German and French regulations. The latter especially has exercised a great influence on the drafting of the new regulations. At the same time, it cannot be denied that the "Battle-Instructions" should be revised, as it is of a too hard-and-fast description, and does not leave enough to individual initiative.

Finally, a special chapter contains notes and tactical considerations on the different arms, their methods in action, on the dispositions to be taken by infantry against cavalry, on the attack and defence of artillery, on artillery fire over infantry.—*Revue d'Infanterie.*

The Grand Manœuvres in 1908.—The recently issued orders to the French Army with regard to this year's exercises and manœuvres show that the Chief Command intend to direct very special attention on this occasion to the training of the troops. Most voluminous are the directions with regard to the army manœuvres, which will take place in the centre of France under the supervision of General de Lacroix, and which will last for ten days. The following will take part in these manœuvres : The IVth, Vth, VIIIth, and IXth Army Corps, the 6th and 7th Cavalry Divisions, the 1st

Colonial Infantry Division, and a few reserve units which will be notified later. The two parties will be composed as follows: the IVth and Vth Army Corps and the 6th Cavalry Division, under General Millet, on the one side; and the VIIIth and IXth Army Corps, the 7th Cavalry Division, and the 1st Colonial Infantry Division, under General Mathis, on the other. It is noteworthy that, in accordance with the recent cadre regulation with regard to the increase of artillery, each of the four army corps will be strengthened by two artillery brigade divisions of three batteries each; the Colonial Division will also be given two artillery brigade divisions, as well as one squadron and one engineer company. Precise information as regards the calling out of reserves is still lacking; at the same time, it is evident that the Chief Command intend to pay very special attention to their training during the manœuvres. With the reservists the infantry companies will be brought up to a strength of 180 men each.

Of the army corps not taking part in the army manœuvres the IIInd, XIIIth, XVth, XVIth, and XVIIth Army Corps and the 5th Infantry Division (Paris) will have division manœuvres lasting for 13 days; the Ist, VIth, VIIth, Xth, XIth, XIIth, XIVth, XVIIIth, and XXth Army Corps will hold brigade manœuvres lasting for 12 days. The 6th Infantry Division does not take part in the autumn manœuvres; but on the other hand, all the troops quartered in Corsica will be brought together for 12 days' manœuvres. Of the Colonial troops, only the 1st Infantry Division has up to date been detailed to take part in the army manœuvres; further information will be issued with regard to other Colonial units which will take part with the Home Army in their various manœuvres.

More extensive, too, than in former years are the cavalry division manœuvres. With regard to them, the intelligence is confirmed that the French Army will put 10 cavalry divisions in the field in war, whilst in peace only 8 divisions are formed. It will be further observed from the orders with regard to the manœuvres of cavalry divisions, that very great demands are made on these divisions. Thus the 6th and 7th Cavalry Divisions not only take part for 10 days in the army manœuvres, but will also participate with the other 6 divisions in division manœuvres of 8 days, in which field firing is included, but not the days of marching for assembly and orientation.—*Internationale Revue über die Gesamten Armeen und Flotten.*

The Grand Manœuvres in 1908.—A Cabinet Order of the 20th February last contains the following rules with regard to the approaching grand manœuvres in Prussia:—

The XVth and XVIth Army Corps will manœuvre in opposition to one another before the Emperor. In consequence of an agreement with the Prince Regent of Bavaria, the 3rd Infantry Division (Landau) and a cavalry division of the Bavarian Army will take part in these manœuvres.

Four cavalry divisions will be formed. The A Division (XVIth Army Corps) by the following cavalry brigades: the 28th (Carlsruhe and Bruch-

Germany. sal), the 30th (Sarrebourg), and the 34th (Metz and Saint Avoid); the 2nd Machine Gun Detachment (Bitsch), the horse artillery brigade division of the 8th Field Artillery Regiment (Sarrebrück), and a cavalry pioneer detachment of the XVIth Army Corps.

The B, C, and D Divisions will be formed respectively in the Vth, VIIth, and VIIIth Army Corps.

In addition the Guards' Cavalry Division will be made up as follows for the manœuvres: the 1st, 2nd, and 3rd Guards' Cavalry Brigades, the 1st Guards' Machine Gun Detachment, and the horse artillery brigade division of the 1st Guards' Field Artillery Regiment.

The Guards' Cavalry Division and the Divisions B, C, and D will carry out special cavalry manœuvres in the instruction camps at Döbritz, Posen, Senne, and Elsenborn. The B Cavalry Division (not including formations of other arms attached to it) will execute, under the direction of the Inspector-General of Cavalry, a reconnoitring and security manœuvre against the 11th (Breslau) Cavalry Brigade, which consists of three regiments, and which will be reinforced by the 4th (Lüben) Dragoon Regiment. For this manœuvre a cavalry pioneer detachment of the Vth Army Corps will be attached to the B Division.

The cavalry regiments of the XVth and XVIth Army Corps assisting to compose the A Division will take part in the brigade and division manœuvres of their army corps; the cavalry regiments of this division belonging to other army corps will only take part in the Imperial manœuvres. The A and B Divisions will each be allotted a credit of £20 for the special exercises of the pioneer detachments which are attached to them.

In the Guards Corps, in the IXth and in the IIIrd Bavarian Army Corps special attack exercises will be carried out, in which heavy artillery will participate; these exercises will take place under Service conditions in the Guards and in the IIIrd Bavarian Army Corps. The XIIth Army Corps will execute similar exercises, for which purpose a heavy howitzer battalion of the 5th Foot Artillery Regiment and units of lines of communications troops will be attached to it.

Combined pioneer manœuvres, under the direction of the Inspector of Pioneers, will take place at Thorn, Wesel, and Maintz.

The two inspections of telegraph troops will each carry out an exercise for the transmission of intelligence, lasting for three days.

Cavalry long-distance instruction rides will take place in the following Army Corps: the Guards, IIInd, VIIth, IXth, Xth, XVth, XVIth, and XVIIIth. An allowance of £161 is allotted to the Guards Corps, one of £121 to the XVIth Army Corps, and one of £80 10s. to the other army corps for these rides.

The period for manœuvres in army corps which do not take part in the Imperial manœuvres will be fixed by taking the harvest into account as far as possible. It will be endeavoured to limit damages in the selection of the terrain and the nature of the exercises. The dismounted branches should return to their garrison by the 30th September at the latest—the date of the liberation of the class.—*Revue Militaire des Armées Etrangères.*

Kitchen-Wagons.—It appears to have been almost decided in Germany. Germany to provide troops with kitchen-wagons (one per company, squadron or battery). Experiments have been carried out in this regard for some years, and would seem to have yielded satisfactory results. At the same time, no official decision has yet been given out on this subject. The following is a summary of an article by Colonel von François which appeared recently in the *Militär-Wochenblatt*:-

"Kitchen-wagons, whilst assuring, under almost all circumstances, hot food properly prepared for soldiers, diminishes in an enormous degree sickness and mortality from disease, which, in all wars before the Manchurian campaign, have caused more losses than the enemy's fire, as the following figures show :

Campaign of 1866.

Prussians.—Killed, 4,008; wounded, 12,774; total, 16,782. Sick, 57,989; died from disease, 5,000.

Campaign of 1870-71.

Germans.—Killed, 28,278; wounded, 88,543; total, 116,821. Sick, 475,400; died from disease, 14,904.

Campaign of 1877-78.

Russians.—Killed, 16,578; wounded, 40,327; total 56,905. Sick, 951,993; died from disease, 54,329.

When the men are obliged to cook after a battle or after an exhausting march, they do it badly, or not at all. They eat the rations issued to them very badly cooked, or even not cooked at all. They not only thus fail to recuperate their forces, but render themselves liable to many intestinal complaints. On the other hand, kitchen-wagons permit of the issue of a hot meal, properly prepared, to the soldier, which restores his strength and enables him to devote the maximum of time to rest, on arrival at the halting place, or at the end of a fight, and even during lulls in the latter.

The great fault found with kitchen-wagons is that they further increase the train, which is already of considerable dimensions, of the combatants. For the four infantry regiments of a division this makes 48 wagons. This increase might be considerably curtailed if, on the introduction of kitchen-wagons, the heavy and cumbersome canteen wagon of each battalion was abolished. The increase would then not be more than 36 wagons. Should these kitchen-wagons be adopted, their place will, undoubtedly, be with the fighting train, which should carry all that the troops may require in action. They are as necessary there as the company-wagons, the ammunition-wagons, or the hospital wagons. If they march with the regimental train they would never be up on the days when the troops are in action, which is just when they would be most useful. The new Field Service Regulations will have to lay down if they should be grouped by battalion, by regiment, or by any other method. It is probable that this will vary according to circumstances.

Germany. The following are the conditions the kitchen-wagons should fulfil :—

1. Be able to contain enough for a company, and be able to cook all sorts of meat and vegetables.
2. Cook quickly, and keep the food hot for a long time.
3. Carry the necessary combustible during the march, even if it be wood.
4. Be easily heated and cleaned, be of solid and simple construction.
5. Carry a receptacle for water for the preparation of tea or coffee, and for the cleaning of the men's camp kettle and mess tins.
6. Be easily drawn by two horses, be able to trot along roads and go across country, the driver and the cook being carried on the wagon.
7. Contain a receptacle for keeping the necessary kitchen utensils, and for the second ration for the company effective.

The advantages resulting from the adoption of kitchen-wagons are the following :—

1. The preservation of the rations in a clean state until they are cooked.
2. The preparation of rations by an expert.
3. Entire use of the rations issued to the unit, whereas when they were issued to individuals for transport there were always losses.
4. Freeing men from the cooking of the food, which entail time and trouble.
5. Rapid cooking on the march, and possibility of feeding the men during pauses of the action, or, at all events, before they go to rest.
6. Easy supervision of the rations and of the cooking of them by commissariat officers and their assistants.

Reorganisation of the Militia.—A General Order of the War United States. Department at Washington, dated 2nd November, 1907, reorganises the United States Militia in accordance with the principles laid down by the Dick Act of the 21st January, 1903. This order came into force on the 21st January, 1908.

It is generally known that, apart from the Regular Army, about 60,000 Volunteers strong, all citizens of the United States, are liable to serve in the Militia from the age of 18 to 45 years. This contingent of citizens, more than 12 million strong, is divided into organised Militia (one-hundredth part of the whole contingent), and the Militia reserve. As a matter of fact, it is only the organised Militia that counts; the Militia reserve is a mass of men without either military instruction or organisation, and no account is ever taken of it.

The organised Militia is recruited by means of voluntary enlistments, the conditions of enlistment varying in the different States. According to the provisions of the Act of 1903, men of the Militia must go into camps of instruction for at least 5 days, and take part in at least 24 practices at the range annually. Governors of States may, however, give leave of absence. Militia units are entirely under the Governors of States, and the Federal Government has but very weak powers of control over them. These units, too, have invariably had a tendency towards organising in independent units, with more or less high-sounding designations, where the discipline is lax, but where opportunities for parading in fancy and becoming uniforms are frequent.

United States. There were too many officers in them, there being on an average 1 officer to every 13 men, and 1 non-commissioned officer to every 4 men.

Considerable difference existed between States, and even in States themselves, in the organisation of the units. Infantry regiments consisted of 2 or 3 battalions, and battalions of 2, 3, 4, or 5 companies. Effectives varied to infinity, and especially there were a most vexatious number of independent units. Under such conditions it was utterly impossible to prepare for the constitution of large units for time of war.

The Act of the 21st January, 1903, authorised the Federal Government to make the organisation of Militia units uniform, to regulate the proportion of officers, and to fix the minimum effective of each unit. It is this reorganisation which was laid down in the General Order of the 2nd November last, of which the following is a rapid analysis:—

The organised Militia consists of:—

A general staff and various staffs and departments corresponding to the departments and staffs of the Regular Army;

Divisions commanded by major-generals, each assisted by a staff of a fixed composition;

Each division consists of 2 brigades (or more);

A properly organised medical department, hospital orderlies, engineers, and signalling corps.

Infantry.—The infantry will be organised in regiments of 3 battalions of 4 companies, the remaining companies being formed into independent battalions. The minimum effectives will be:—

A company, 3 officers and 38 rank and file; a battalion, 3 battalion staff officers and 4 companies (233 men); a regiment, 6 regimental staff officers and 3 battalions (732 men); and, in addition, a certain number of doctors.

Cavalry.—The cavalry will be organised into regiments of 3 squadrons of 4 troops, the remaining troops forming independent squadrons. The minimum effective will be:—

A troop, 3 officers and 58 men; a squadron, 3 officers and 4 troops (233 men); a regiment, 6 officers and 3 squadrons (732 men); and, in addition, a certain number of doctors.

Field Artillery.—Will be organised in regiments of 2 battalions of 3 batteries each. The minimum effective will be:—

A battery, 5 officers and 133 men; a battalion, 3 officers and 3 batteries (401 men); a regiment, 5 officers and 2 battalions (835 men); and, in addition, a certain number of doctors.

Coast Artillery.—Will be formed into a corps with a special organisation, a special staff, and a certain number of companies.

Such will, from the 21st January, 1903, be the new constitution of the organised Militia units of the United States, a new organisation which, compared with the former confused one, marks a sensible progress in the preparation and organisation of large units for war.

On the 31st December, 1906, the organised Militia consisted of 112,390 officers and men. The Secretary for War then estimated that

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80 per cent. of that effective would come to the colours in the event of an invasion of the country, or of an insurrection against the Federal authority. These figures are interesting to remember, for it is the only reserve immediately available on which the Government could rely in case of war (in case of an external war, be it understood), as Militia units cannot be employed as constituted units except with their own consent.—*Revue Militaire des Armées Etrangères*.

NAVAL AND MILITARY CALENDAR.

APRIL, 1908.

2nd (Th.) H.M. Destroyer *Tiger* run down by H.M.S. *Berwick*; 28 officers and men being lost.

8th (W.) 2nd Battalion Cameron Highlanders left Hong-Kong for Tientsin in R.T.M.S. *Dufferin*.

13th (M.) 2nd Battalion Cameron Highlanders arrived in Tientsin from Hong-Kong in R.T.M.S. *Dufferin*.

17th (F.) Severe fighting took place between French troops and Moors in Morocco.

19th (Sun.) H.M.S. *Suffolk* arrived at Plymouth from the Mediterranean.

23rd (Th.) North Sea agreement between Great Britain, France, Germany, Sweden, Denmark and Holland was signed at Berlin.

24th (F.) War against the Mohmands, on the Indian Frontier, commenced

26th (Sat.) British Column inflicted a severe defeat on the Mohmands.

25th (Sat.) H.M.S. *Gladiator* sunk by collision with American Liner *St. Paul* in the Solent, 27 officers and men drowned.

27th (M.) H.M. Destroyer *Gala* sunk by collision with H.M.S. *Attentive*, with the loss of one officer drowned.

28th (T.) H.M.S. *Canopus* commissioned at Portsmouth for service in the Mediterranean.

30th (Th.) H.I.M.S. *Matsushima* sunk in Makang Harbour, Pescadores, by explosion in magazine. Cause unknown; 200 officers and men reported to have been lost.

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NOTICES OF BOOKS.

The Story of the Guides. By Colonel G. J. YOUNGHUSBAND, C.B.
(Macmillan & Co., Ltd.) London, 1908.

That famous Indian frontier regiment, "The Guides," have crowded into their sixty years of existence a history of extraordinary interest. Raised at Peshawar in 1846 by Harry Lumsden on the suggestion of Sir Henry Lawrence, the Corps was originally intended, as its name suggests, to act as guides and scouts on the turbulent northern frontier of the then semi-independent Punjab. The only British troops stationed in that country were a few of the Company's regiments quartered at Lahore to support the authority of the Resident. Sir Henry Lawrence, that wise and original thinker, felt the need of a mobile body of troops, horse and foot, suitably clothed and equipped, and composed of fighting men of undoubted loyalty, who should always be ready to move at a moment's notice, and capable of acting as an intelligence corps in frontier warfare. Sir Henry clearly saw that such warfare was rendered inevitable by the new responsibilities entailed on the Indian Government by the recent northward move which had brought it into contact with the turbulent races of "Yaghistan"—the land of revolt—the northern border-land of the Punjab. The result of Sir Henry Lawrence's decision was the formation of a small corps, consisting at first of one troop of cavalry and two companies of infantry, which has gradually expanded to the present strength of the Guides, of fourteen hundred men, with twenty-seven British officers; the whole history of that Corps being practically the story of Anglo-Indian warfare during the sixty years of its existence. The title, "The Story of the Guides," as applied to the slender volume of less than 200 pages, now under review, is therefore somewhat misleading, for the whole of that deeply interesting history would fill four times that number of pages, and then leave much untold. Colonel George Younghusband, the present distinguished commandant of the Guides, who wields the pen as effectively as the sword, has chosen rather to present to us a series of sketches of prominent incidents in that picturesque story, and the result is a volume of great interest and charm, containing many stories of the Guides, but not *the* story of the Guides, in the full sense of the phrase. While, like Oliver Twist, we ask for more, we may well be thankful for what we get, for not only is every incident in Colonel Younghusband's little book described in a highly graphic and interesting manner, but new light is thrown on several previously obscure passages of Indian military history. The sketches of the exploits of some of the more famous native officers and soldiers of the Guides are of great interest, and present to us the chivalrous and adventurous side of Indian warfare. Take, for instance, the story of the Khatak Ressaldar Fatch Khan, who in 1848, with seventy horsemen, fearlessly attacked 1,200 Sikh cavalry

in the open, near Multan, charged through them again and again, and by sheer audacity and martial skill drove them like sheep before him to the very walls of the city. The capture, too, of Fort Govindgarh by Subadar Rasul Khan, is an infantry exploit as astonishing as that of the cavalry just described, and many other incidents described by Colonel Younghusband equally demand our admiration.

Of the brilliant services of the Guides on the ridge at Delhi we are told nothing, though a sketch is given of their astonishing march thither; the author feeling, perhaps, that the story of the siege is too familiar for repetition. Yet without it the history of the Guides cannot be held complete.

Colonel Younghusband's narrative of the defence of the Embassy at Kabul, in 1879, is of deep interest, and with justifiable pride the author heads it with the well-known eulogy written by that good and experienced soldier, Sir Charles Macgregor, whose approbation is praise indeed. "The annals of no army and no regiment can show a brighter record of devoted bravery than has been achieved by this small body of Guides. By their deeds they have conferred honour, not only on the regiment to which they belong, but on the whole British Army." To these words we need add nothing but a strong recommendation to every young soldier to read this most interesting and inspiriting book.

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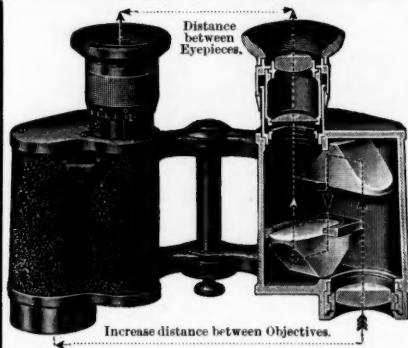
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